ROYAL STATISTICAL SOCIETY
22 JUL. 1904

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

ON THE

HEALTH

OF THE

CITY OF BIRMINGHAM

FOR THE YEAR **1903.**

BIRMINGHAM:
HUDSON AND SON, PRINTERS, EDMUND STREET AND LIVERY STREET.

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HEALTH DEPARTMENT,
THE COUNCIL HOUSE,
BIRMINGHAM,

April 21*st*, 1904.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

GENTLEMEN,

Introduction.

In presenting this joint report on the health of the City of Birmingham for the year 1903, it is necessary to point out that the order of the Local Government Board requires every medical officer of health to make a report on all matters relating to the health of his district for the year or part of the year during which he holds office. In order to maintain a continuity in the Birmingham reports, your Committee and the Local Government Board sanctioned the issue of this joint report, thus avoiding two separate and more or less incomplete ones.

The year 1903 was a remarkable one in Birmingham from the point of view of its healthiness. The death-rate continued low during the whole of the year, and we have now the satisfaction to record that the annual mortality rate was the lowest on record. Indeed, it is probable that the rate during last year was lower than in any other year since Birmingham emerged in the distant past from the condition of a village into that of a small town. The mortality rate was 17·2 per 1,000 last year, against 18·0 in the previous year, and 20·0 in the previous ten years.

Not alone was the general mortality low. The prevalence of many of the preventable diseases was correspondingly low, and the infantile mortality rate was relatively a favourable one. Small-pox continued to give a considerable amount of anxiety to those responsible for its prevention, as it was repeatedly introduced into the City during the year. Fortunately on no occasion did it become prevalent.

Introduction (*continued*).

The favourable sickness and mortality statistics of 1903 appear to have been very largely due to the meteorological conditions which obtained during the whole year. Most of us will remember the year as cold and damp and most unpleasant. In spite, however, of these conditions—indeed, we may say on account of them—the year proved the healthiest of all those of which we have a record. The explanation of this result is that there were no extremes of heat and cold, but a temperature never much above or below the mean. Hot summers always bring about intestinal and allied disorders, while cold winters give rise to widespread and severe chest and other complaints. The greater or less prevalence of these forms of disease determines for the most part the kind of annual bill of health and mortality of the community. It is possible, however, with reasonable cleanliness in our houses, in our food supplies, and in our general surroundings, that warm weather shall not have the same disastrous effects as it has had in past years, and that improved moral and physical qualities resulting from better education and increased prosperity, individual and general, will confer the means of securing greater protection from the dangerous and fatal rigours of the winter season. The measure of what will happen when individuals are careful as regards cleanliness alone is indicated by such a difference as occurs in the number of deaths in 1903 (9,123), and in the year 1901 (10,402), a difference of 1,279. If we consider the progress made in the health of the city during the thirty years commencing with 1874, when the death-rate was 26·8 per 1,000 of the population, and ending with 1903, when the death-rate stood at 17·2, a diminution of 40 per cent., we feel justified in the anticipation that very great benefits are in store for our race in the future.

We are,

Your obedient Servants,

ALFRED HILL, M.D.,
(*Medical Officer of Health to Sept. 30th*, 1903.)

JOHN ROBERTSON, M.D., B.Sc.

POPULATION.

Population.

The population of the City estimated to the middle of the year (June 30th), 1903, was 533,039, consisting of 257,314 males, and 275,725 females. This estimate is based on the assumption that the population continues to increase at the same rate as it did between the two last census enumerations. It is possible and even probable that the above estimate is slightly over rather than below the actual numbers. Judged by the birth-rate here and in other towns the error does not appear, however, to be a large one.

Area, population, and density in Wards.

The above population, excluding the inmates of large public institutions, was distributed in the various wards as follows:—

WARD.	Area in Acres.	Population 1903.	Persons per Acre.
Rotton Park	1,233	46,887	38·0
All Saints'	532	42,101	79·1
Ladywood ...	249	25,253	101·4
St. Paul's	264	15,561	58·9
St. George's	120	20,412	170·1
St. Stephen's ...	169	23,768	140·6
St. Mary's	184	16,248	88·3
St. Bartholomew's ...	313	26,572	84·9
Market Hall	229	9,483	41·4
St. Thomas'	179	18,559	103·7
St. Martin's	468	24,019	51·3
Edgbaston and Harborne...	3,407	31,311	9·2
Deritend	279	24,077	86·3
Bordesley	1,387	56,825	41·0
Duddeston	299	23,541	78·7
Nechells	512	33,710	65·8
Balsall Heath	463	39,359	85·0
Saltley	2,352	45,427	19 3
Whole City	12,639	533,039	42·2

Occupied houses in Wards.

The next table shows the number of occupied houses as supplied by the Overseers in each year since 1896, and the increase or decrease in the eight years:—

OCCUPIED HOUSES.

WARD.	1896	1897	1898	1899	1900	1901	1902	1903	Increase or Decrease in 8 years.
Rotton Park .	8354	8615	8739	9079	9442	10199	10041	10215	+ 1861
All Saints' ...	7827	7853	8075	8549	9028	8847	8939	8996	+ 1169
Ladywood ...	5703	5692	5605	5639	5645	5627	5634	5662	– 41
St. Paul's ...	3762	3718	3688	3650	3630	3187	3316	3318	– 444
St. George's ...	4577	4572	4585	4670	4632	4572	4623	4618	+ 41
St. Stephen's ...	4749	4741	4864	4913	4882	4963	4952	4962	+ 213
St. Mary's ...	3174	3262	3205	3230	3237	3308	3325	3378	+ 204
St. Bartholomew's	5195	5134	5119	5315	5326	5297	5301	5241	+ 46
Market Hall ...	2429	2363	2362	2372	2335	2109	2094	2075	– 354
St. Thomas' ...	4050	4056	4030	4088	4170	4201	4067	4061	+ 11
St. Martin's ...	5150	5163	5170	5216	5260	5220	5250	5233	+ 83
Edgbaston and Harborne...	5734	5863	6056	6289	6373	6386	6473	6496	+ 762
Deritend	5269	5305	5415	5370	5248	5232	5194	5101	- 168
Bordesley ...	9412	10231	10869	11179	11514	11703	11907	12168	+ 2756
Duddeston ...	4795	4921	5240	5082	5132	5060	5026	4977	+ 182
Nechells	6757	6771	6869	7036	7021	7012	6955	7023	+ 266
Balsall Heath ...	8200	8250	8419	8547	8650	8700	8750	8825	+ 625
Saltley	5720	6188	6764	7242	8053	8340	8715	8960	+ 3240
City	100857	102698	105074	107466	109578	109963	110562	111309	+ 10452

MARRIAGES.

Marriage-rate.

The number of marriages registered in the City during 1903 was 4,881, giving a rate of 18·4 persons married per 1,000 of the population. The mean marriage-rate for the City during the last 31 years is not available, but for the three registration districts in which Birmingham is situated, it was 17·2 per 1,000 per annum. In Chart No. 1 is set out the yearly percentage above or below this mean marriage-rate. On the same chart is shown the birth-rate worked on similar lines for comparison.

BIRTHS.

Birth-rate.

Sixteen thousand eight hundred and sixty-six births were registered during 1903. The birth-rate was, therefore, 31·7 per 1,000 per annum. As will be seen from the following table, the birth-rate has only once reached a lower figure, viz., in 1894, when it was 31·6 per 1,000.

Year.	Birth-rate.	Year.	Birth-rate.	Year.	Birth-rate.
1873	40·8	1884	35·9	1895	32·3
1874	41·2	1885	34·9	1896	32·5
1875	40·6	1886	34·2	1897	33·2
1876	42·5	1887	33·2	1898	34·0
1877	42·4	1888	32·4	1899	34·3
1878	41·7	1889	32·7	1900	32·7
1879	40·0	1890	32·1	1901	32·1
1880	38·3	1891	33·8	1902	31·9
1881	37·0	1892	33·2	1903	31·7
1882	36·8	1893	32·6		
1883	36·1	1894	31·6		

Birth-rates in other large towns.

In other large towns the rates for 1903 were as follows:—

	Birth-rate.		Birth-rate.
London	28·4	West Ham	33·7
Liverpool	33·4	Hull	31·3
Manchester	32·1	Nottingham	28·3
Leeds	29·4	Salford	32·3
Sheffield	33·2	Newcastle	31·1
Bristol	27·4	Leicester	27·4
Bradford	23·3		

Decline in birth-rate.

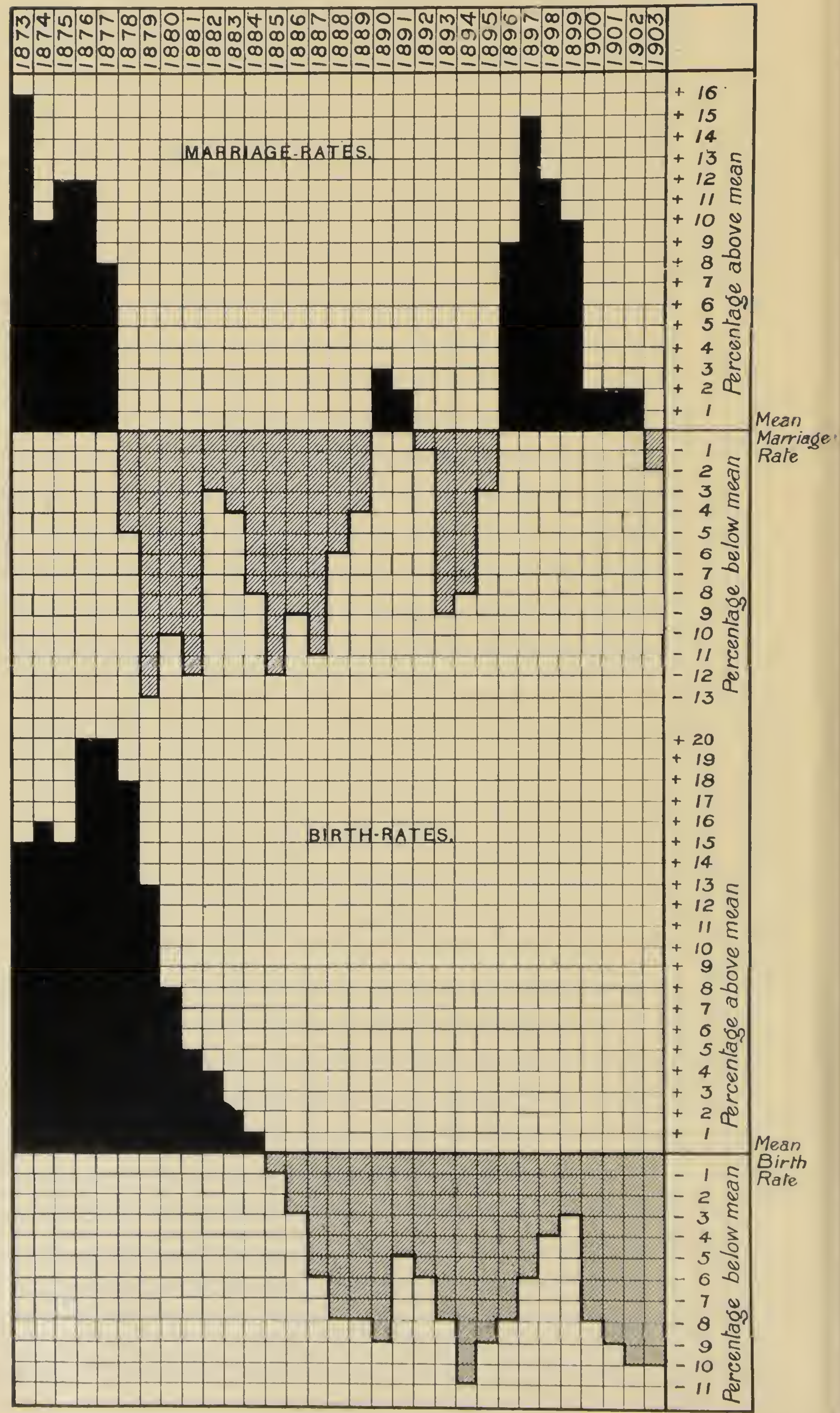
The birth-rate for the whole of England and Wales has shown a rapid decrease during recent years, as is indicated by the following figures:—

	Birth-rate.		Birth-rate.		Birth-rate.
1851-60	34·1	1893	30·7	1899	29·1
1861-70	35·2	1894	29·6	1900	28·7
1871-80	35·4	1895	30·3	1901	28·5
1881-90	32·5	1896	29·6	1902	28·6
1891	31·4	1897	29·6	1903	28·4
1892	30·4	1898	29·3		

The continued decline in the birth-rate, both locally and generally, is a matter of considerable importance. It has been shown (1) to have no very direct connection with

CHART No. 1.

Marriage-Rate and Birth-Rate, 1873—1903.



the marriage rate, (2) to be in slight degree due to the increasing number of persons marrying later than formerly, (3) to be mainly due to causes over which the individual has control.

Birth-rate and marriage-rate compared.

The mean birth-rate for the City and the percentage increase or decrease during each of the 31 years is set out on Chart No. 1. Comparing this with the marriage-rate, it will be noted that the fluctuation in the marriage-rate has only had a remote influence on the birth-rate, indicating clearly that other influences are at work in lessening the birth-rate.

The fact that until the beginning of the present year no returns of births were supplied by the district registrars prevents any indication being given of the birth-rate in wards or of the number of births of illegitimate children for the year 1903.

DEATHS.

Death-rate.

The deaths of 9,123 persons belonging to Birmingham were registered during 1903. This is equal to a death-rate of 17·2 per 1,000 of the population per annum, 18·7 per 1,000 for males, and 15·7 per 1,000 for females.

In former years the death-rates for Birmingham were as follows: —

	Death-rate per 1000.	
1873	24·8	Average 24·8
1874	26·8	
1875	26·3	
1876	22·4	
1877	23·9	
1878	25·2	Average 21·6
1879	21·8	
1880	20·5	
1881	19·8	
1882	20·8	
1883	21·4	Average 20·7
1884	21·6	
1885	19·8	
1886	20·5	
1887	20·4	
1888	18·6	Average 20·4
1889	19·7	
1890	22·0	
1891	21·7	
1892	20·0	
1893	21·5	Average 20·2
1894	18·2	
1895	19·9	
1896	20·4	
1897	21·1	
1898	19·5	Average 19·8
1899	20·5	
1900	21·0	
1901	19·9	
1902	18·0	

As a means of graphically indicating year by year the extent of the increase or decrease in the death-rate, the percentage above and below the mean death-rate for 31 years has been calculated and set out on Chart No. 2.

It will be seen that the rate for 1903 is the lowest on record. The cause of the low rate is dealt with under the heading of Causes of Death.

Death-rates in other large towns.

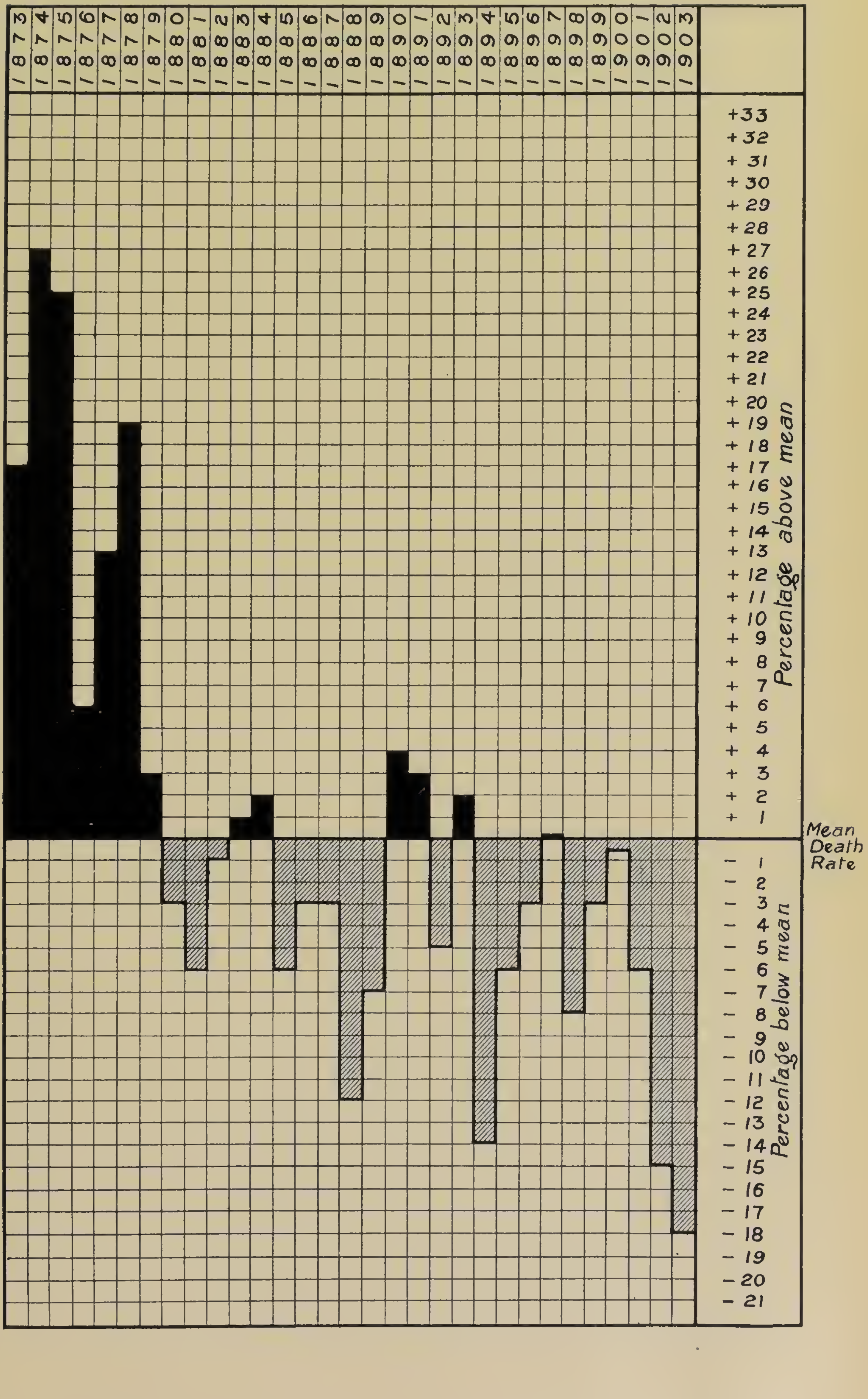
It is desirable to be able to compare the death-rate of one city with another to ascertain by this rough means whether proper sanitary progress is being made. For this purpose several considerations have to be kept in view. (1) That the age and sex distribution of each town varies, and for this reason alone the mortality-rate varies. (2) That towns differ very much as to whether they contain the whole or only part of the population which they support. In many towns cheap railway and tram services have enabled an increasingly large number of the healthiest of the population to reside outside the boundary. The extent to which this occurs varies very much in different towns. In Birmingham it is undoubtedly an important factor when making comparisons. In three of the residential suburbs lying on the Birmingham boundary, and containing mainly a population dependent on the City the death-rates for 1903 were 10·2, 10·9, and 11·1. Unless, therefore, the good and the unhealthy lives in a population are uniformly included, a large source of error is likely to occur.

It is possible to correct the death-rate for the first of these sources of error, *i.e.*, age and sex. This has been done by the Registrar-General in the accompanying figures:—

	Uncorrected or Crude death-rate per 1,000.			Death-rate corrected for age and sex distribution.		
Towns.	1892-1901.	1902.	1903.	1892-1901.	1902.	1903.
London ...	19·2	17·7	15·7	20·2	18·6	16·5
Liverpool ...	24·1	22·5	20·5	25·8	24·0	21·9
Manchester ...	23·5	20·0	19·7	26·3	22·3	22·3
Birmingham ...	20·7	18·6	17·8	22·3	20·0	19·1
Leeds	19·9	17·6	16·6	21·7	19·2	18·1
Sheffield ...	20·4	17·1	18·6	22·0	18·4	20·1
Bristol ...	17·8	17·4	14·3	18·3	17·8	14·7
Bradford ...	18·4	15·8	16·4	20·3	17·5	18·1
West Ham ...	18·6	17·1	15·3	19·9	18·3	16·3
Hull	19·4	17·2	16·9	19·9	17·6	17·3
Nottingham ...	18·7	16·7	16·9	19·7	17·6	17·8
Salford ...	23·7	19·3	19·0	26·2	21·3	21·0
Newcastle ...	21·1	19·9	19·2	22·8	21·5	20·7
Leicester ...	17·7	14·9	14·2	18·9	15·9	15·2

CHART No. 2.

Death-Rate in Birmingham, 1873—1903.



Death-rates in Wards.

The death-rates in the different wards of the City for 1903 and each of the four preceding years are shown in the subjoined table :—

Wards.		Death-rate per 1000.			
	1899	1900	1901	1902	1903
Rotton Park ..	18·2	17·8	16·1	14·4	13·9
All Saints' ...	17·6	19·6	17·5	15·5	15·7
Ladywood ...	19·8	19·2	20·0	17·3	17·8
St. Paul's ...	22·0	20·4	22·6	18·2	19·2
St. George's ...	23·8	26·3	23·2	21·6	20·8
St. Stephen's ...	26·6	26·3	26·6	26·5	21·0
St. Mary's ...	30·7	30·4	29·7	24·8	23·1
St. Bartholomew's	27·2	27·7	25·9	24·6	24·4
Market Hall ...	18·8	21·5	17·4	16·9	16·3
St. Thomas' ...	22·9	20·9	20·9	20·1	18·7
St. Martin's ...	21·0	21·9	20·3	20·3	16·8
Edgbaston & Harborne	13·8	14·4	13·1	12·3	12·1
Deritend	24·4	25·0	22·3	20·3	21·5
Bordesley	15·5	15·8	15·4	13·4	13·3
Duddeston ...	21·3	23·4	23·2	21·3	19·7
Nechells	22·5	21·9	22·6	18·7	16·9
Balsall Heath ...	17·5	16·0	15·0	14·8	13·5
Saltley	18·3	16·7	17·6	15·1	15·7
Whole City ...	20·5	21·0	19·9	18·0	17·2

During 1903 the death-rate was reduced in every ward in the City, as compared with the average rate in the previous four years. In St. Mary's the reduction amounted to 5·8 per 1,000 per annum below the ten years' average, in St. Stephen's it was 5·5 per 1,000, in Nechells 4·5, while in Saltley, where the smallest reduction occurred, it was 1·2 per 1,000.

Death-rates at ages.

The death-rates at age groups for five years are set out in the accompanying table :—

	1899	1900	1901	1902	1903.
Under 1 year ...	250·3	245·7	228·3	192·5	189·8
From 1 to 5 years	26·2	26·4	29·3	26·6	23·1
,, 5 to 10 ,,	3·6	3·4	3·5	4·7	4·0
,, 10 to 15 ,,	2·4	2·3	1·8	2·3	1·8
,, 15 to 25 ,,	3·6	3·9	3·7	3·5	3·0
,, 25 to 45 ,,	9·5	10·1	9·2	8·3	7·8
,, 45 to 65 ,,	28·4	29·4	27·9	26·6	24·0
Over 65 years	97·6	106·2	96·9	94·3	93·1

It will be noted from this table how largely the reduced death-rate in 1903 was due to the reduction in the mortality rate among children under five years of age.

INFANT MORTALITY.

Infant mortality

The expression Infant Mortality-rate has come to have a special meaning, differing from other rates calculated on the number of persons living. By this expression is meant the number of deaths of infants under one year of age per 1,000 births during the year.

The Infant Mortality-rate during 1903 was 158 per 1,000 births, as compared with 157 in the previous year, and 188 as the average for the ten years ending December, 1902.

Two thousand six hundred and sixty-eight infants under one year of age died during 1903. The chief causes of death of these, together with the corresponding figures for the five preceding years, are given in the following table:—

CHIEF CAUSES OF DEATH OF INFANTS UNDER ONE YEAR.

Causes of Death	1898	1899	1900	1901	1902	1903
Measles	42	53	35	62	37	50
Whooping Cough ...	104	74	129	81	122	37
Diarrhœa	534	670	475	634	327	462
Enteritis	424	442	331	154	78	84
Tubercular Diseases...	94	91	114	129	98	111
Premature Birth ...	371	366	353	348	361	365
Debility and Marasmus	589	574	670	648	562	531
Convulsions	178	194	178	167	172	119
Bronchitis, Pneumonia, and Pleurisy ...	393	398	500	399	409	413
Suffocation	94	92	92	92	70	95
All other causes ...	464	444	489	436	445	401
Total ...	3287	3398	3366	3150	2681	2668

Infant mortality in other large towns.

The Infantile Mortality-rate in the ten largest towns was as follows:—

London	131
Liverpool	159
Manchester	169
Birmingham	158
Leeds	153
Sheffield	182
Bristol	116
Bradford	148
West Ham	146
Hull	162

It is equally important to know in which districts the infant mortality is highest, but owing to the absence of returns of births this information cannot be obtained. It is satisfactory to know that such returns are now being made, so that this want will not be felt in future years.

The mortality among young infants is relatively a high one in Birmingham, and as a special report has been called for on the causes and means of prevention of infant mortality, further reference to this subject will be left to such report.

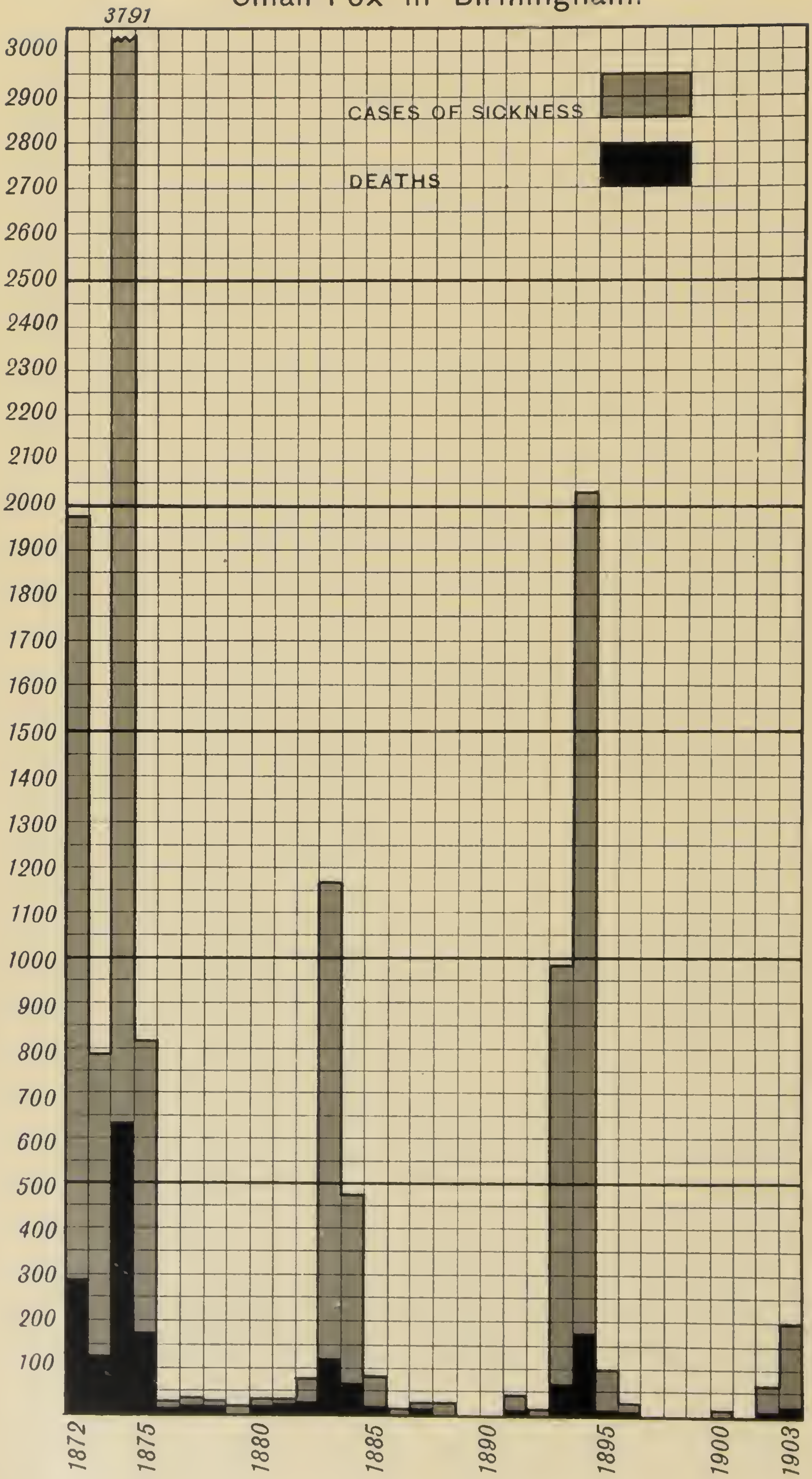
INFECTIOUS DISEASES.

Zymotic death-rate.

The deaths of 1,233 persons were registered as due to the seven principal infectious diseases. This gives a zymotic death-rate of 2·32 per 1,000 of the population, as compared with 2·60 in 1902.

CHART No. 3.

Small-Pox in Birmingham.



Deaths from zymotic diseases.

The causes of death, together with the number of deaths and certain comparative figures, are as follows:—

Diseases.	1903.	Average 1893-1902.	Above or below the average.
Small-pox	12	26	– 14
Measles	195	222	– 27
Scarlet Fever	144	114	+ 30
Diphtheria	135	141	– 6
Whooping Cough	93	254	–161
Typhoid Fever	66	110	– 44
Diarrhœa	588	645	– 57
Whole group	1233	1512	–279

This table shows that the deaths from each of these diseases (except scarlet fever) were fewer in 1903 than the average of the previous ten years. The table also shows what a large part is played by deaths from diarrhœa in producing a high zymotic death-rate.

Zymotic death-rate in other large towns.

The zymotic rate in 1903 in London was 1·77, in Manchester 2·54, in Liverpool 2·51, in Leeds 1·76, in Sheffield 3·10, and in certain of the smaller towns it was much higher.

SMALL-POX.

Small-pox.

Twelve deaths were due to this disease during 1903, as compared with 4 in 1902. Two hundred and fifty-one cases of sickness from this disease occurred, so that the percentage mortality was 4·8. During the London epidemic of 1902 the percentage mortality was 16.

The accompanying Chart No. 3 shows the number of cases of sickness and of death from small-pox in Birmingham since 1872. The percentage mortality for the whole period was 13·4; for the year 1872 it was 15·1.

Of the 251 cases of the disease 171 or 68 per cent. were notified under the Infectious Disease (Notification) Act by medical practitioners, while 80 or 32 per cent. were ascertained by visits of the staff of the Health Department.

The disease was imported during 1903 on many occasions from other districts in the Midlands. These frequent importations caused the cases to be distributed as follows:—

January	16	July	4
February	40	August	0
March	73	September	25
April	20	October	11
May	36	November	6
June	14	December	6

Small-pox in Wards.

Seven of the patients were inmates of public institutions. The wards in which the other cases occurred were as follows:—

Rotton Park	5	St. Thomas'	4
All Saints'	4	St. Martin's	7
Ladywood	2	Edgbaston & Harborne	7
St. Paul's	1	Deritend	11
St. George's .. .	10	Bordesley	9
St. Stephen's . . .	6	Duddeston . ..	19
St. Mary's .. .	9	Nechells ...	26
St. Bartholomew's .	61	Balsall Heath .	38
Market Hall .. .	0	Saltley ...	25

The age distribution of the cases was as follows:—

Small pox at ages.

	Total Number of Cases.			Deaths.		
	Showing Vaccination Cicatrices.	Showing None.	Doubtful.	Showing Vaccination Cicatrices.	Showing None.	Doubtful.
Under 1 year of age	—	7	—	—	3	—
From 1 to 5 years	—	4	—	—	—	—
,, 5 to 10 ,, ...	3	10	—	—	—	—
,, 10 to 20 ,, ...	41	13	1	1	1	—
,, 20 to 60 ,, ...	134	31	3	2	2	1
Over 60 years	3	—	1	1	—	1
	181	65	5	4	6	2

Small-pox in lodging houses.

Thirteen outbreaks occurred during the year at common lodging houses. In four of these secondary cases occurred. The total number of these cases at common lodging houses was 26. Such cases are always difficult to deal with, and the above results may be considered satisfactory.

Seven cases occurred at the workhouse, and in each of these instances no secondary case followed.

Precautions against Small pox.

The chief difficulty which was experienced during the year arose from certain cases passing unrecognised for considerable periods. Elsewhere similar difficulties have been experienced, and these generally divide themselves into three groups:—(A) Those severe cases where the ordinary signs of Small-pox are absent, e.g., Hæmorrhagic Small-pox; (B) those ordinary cases so mild that they pass unrecognised by patient and doctor; and (C) those cases where obvious errors in diagnosis are made in good faith. To the first group belong at least two cases, and these gave rise to a large number of secondary cases. To group B belong 31 cases, and to group C belong 9.

In the case of these latter two groups the provision made by the Health Committee for help in diagnosis was very much appreciated by the medical profession. Dr.

McCrindle, who was appointed in June, 1902, to act as expert diagnostician in any case of difficulty, was kept actively engaged for a considerable part of the year in visiting doubtful cases.

In two instances during 1903 cases notified as Chicken-pox turned out afterwards to be Small-pox. There was, however, in each of these cases nothing to lead the Medical Officer of Health to suspect any mistake, and it was only by reason of secondary cases occurring that the nature of the primary cases became evident.

The value of the notification of Chicken-pox has not been great. Its advantages appear to be that (1) the medical attendant is called upon to make a definite diagnosis, " Small-pox v. Chicken-pox " ; (2) a notification of Chicken-pox when received at the Health Office during an epidemic period may lead to suspicion in certain cases, owing to other information as to the localisation of cases of Small-pox; and (3) it enables medical practitioners who have a doubt to notify the case as " Chicken-pox (?) Small-pox." The disadvantages are mainly (1) that the number of cases notified is large, and therefore costly; (2) that it is not ethical to check the diagnosis in such cases; (3) that only 50 or 60 per cent. of all the cases of chicken-pox are seen by medical men; and (4) that in the majority of cases modified small-pox may be notified as chicken-pox without raising suspicion.

Except in one instance all the cases of small-pox were removed to hospital on the day they were ascertained. The exceptional case was that of a man who was said to be in a precarious condition of health. In this instance the shop at the patient's residence was closed, and certain precautions taken, and no further spread occurred. The procedure in this case, however, is one of great danger, and should not be repeated unless very exceptional circumstances arise.

Small-pox and disinfection

The shed at Bacchus Road Disinfecting Station was the only shelter for quarantine purposes available during the year. For efficient disinfection it is necessary to remove the inmates of a cottage or small house while all the rooms are being disinfected. It is necessary, therefore, in nearly all cases to provide a shelter for the other inmates of the house while this disinfection is in progress. But even more important is it that the clothing of these inmates should be disinfected, as it is often found that they have been in very intimate contact with the patient before his removal.

To make better provision for these contacts the Health Committee have given instructions for two houses near the Small-pox Hospital to be got ready for contacts. When these are ready it will be possible to remove the other inmates of each house to this shelter where they will be bathed, their clothing disinfected, and vaccination offered.

In about twelve hours these people will be sent home with clothing free from infection to houses that are quite free also. They will thus be prevented from going in their infected clothes to free libraries or the houses of their relatives and friends and other places while the house disinfection is in progress.

It is not intended that these houses should be used as quarantine stations except in special cases. Here as in most towns it is found that daily visits to the persons who are being kept under observation is sufficient. The only exception to this is the case of tramps and others frequenting lodging houses. Unless quarantine accommodation is available, these men remove to other towns, and are the means of spreading infection. Such quarantine accommodation is mainly of value to other towns.

Small-pox and Vaccination

Immediate re-vaccination after exposure to infection has proved most effective. Indeed it is the sheet anchor of the Health Department in preventing the further spread of the disease. The anomaly, however, in the law which places the responsibility for preventing small-pox on one authority, and for vaccination and re-vaccination on another, is one which is harmful in many ways. During 1903 certain of the vaccination officers gave at all times the most prompt and energetic assistance, while in other cases a good deal of delay and apathy occurred. It is probable that had the sanitary authority been charged with the execution of the Vaccination Acts during 1903, several cases of small-pox would have been prevented.

The effect of previous vaccination on small-pox cases during 1903 is set out in the table on page 65. The figures are too small in number to be of real value, but generally they indicate that the mortality in each group was as follows:—

Cases in which vaccination cicatrices were visible	2·2 per cent.
Cases in which there were no vaccination cicatrices	9·2 per cent.
Doubtful cases (five cases only)	40 per cent.

No case of small-pox occurred among the staff of the small-pox hospital, or of the Health Department, notwithstanding their intimate contact with infection.

VACCINATION.

Vaccination.

The percentage of primary vaccination in Birmingham, as compared with that in England and Wales, is indicated in the following table, which shows the number of children not finally accounted for (including cases postponed) per cent. of births:—

	Registration Districts of			
	Birmingham.	Aston.	King's Norton.	England and Wales.
1884	2·4	5·5	2·1	5.5
1885	4·3	6·8	2·8	5·8
1886	4·6	7·6	2·5	6·4
1887	5·5	8·6	3·0	7·1
1888	4·9	8·7	4·3	8·5
1889	5·8	9·1	4·7	9·9
1890	5·8	10·1	5·5	11·3
1891	8·3	13·5	11·0	13·4
1892	7·9	13·7	19·2	14·9
1893	6·5	12·1	21·3	16·1
1894	8·0	13·2	27·3	19·2
1895	7·6	14·9	23·3	20·5
1896	7·7	14·4	19·1	22·9
1897	9·0	14·5	25·7	22·7
1898	14·6	17·5	28·5	21·5
1899	16·7	14·8	23·2	17·2

The comparable figures for the year 1900 to 1903 are not yet available. The local figures for the year ending June 30th, 1903, are as follows: these, however, are subject to correction:—

Birmingham, year ending June 30th, 1903.

Births returned	16,767	
Died unvaccinated	1,936	
Conscientious objections	83 or 0·5%	of total.
Successfully vaccinated	12,837 or 86·6%	of survivors.
Postponed by medical certificate	311 or 2·1%	,,
Removed to other vaccination districts	217 or 1·5%	,,
Lost sight of	1,047 or 7·1%	,,
Still under notice	264 or 1·8%	,,

CHICKEN-POX.

Chicken-pox

This disease was made compulsorily notifiable in April, 1902, and the cases notified during each month were as follows:—

1902.		1903.	
May	284	May	173
June	322	June	164
July	211	July	148
August	101	August	116
September	67	September	81
October	81	October	147
November	143	November	176
December	163	December	175
1903.		**1904.**	
January	116	January	164
February	104	February	139
March	153	March (1st to 19th)	98
April	141		

While this report was being prepared, it was resolved to discontinue this notification, as it was felt that the results obtained were not commensurate with the expense involved—over £200 per annum—and that as good results might be obtained in other ways.

MEASLES.

Measles.

This disease caused 195 deaths during 1903, as compared with an average of 222 in the previous ten years. The ages at death of the 195 cases were as follows:—

Under 1 year	50 deaths.
1 and under 2 years	74 ,,
2 ,, 3 ,,	26 ,,
3 ,, 4 ,,	21 ,,
4 ,, 5 ,,	12 ,,
All under 5 years	183
5 and under 10 years	12
All over 10 years	0

Measles is one of the most infectious of diseases, and although considered one of the common ailments of childhood, it annually causes over 200 deaths. These are by no means confined to the puny and unhealthy children; indeed, if the condition of the children could be classified it would be found that a large proportion of the deaths occur among the most sturdy and healthy of children. Practically in all cases death is due to the lung complications set up by the disease. During 1903 the following complications were recorded as associated with measles:—

Measles and Pneumonia	59
Measles and Broncho-pneumonia	39
Measles and Bronchitis	18
Measles and other complications	33
Measles (alone)	46
	195

Our information as to where cases of measles exist at the present time is very defective. The school attendance officers have reported to us 1,244 houses at which children were absent from school during 1903 on account of measles, but it is probable that the total number of such houses was from 4,000 to 6,000, so that this source of information is by no means complete. In each case where measles was known to exist at a house a copy of a handbill setting out the precautions to be taken was sent.

SCARLET FEVER.

Scarlet Fever

The number of cases during 1902 was greater than in any other year since "notification" came into operation, and during 1903 the number was also a large one, but less than in 1902, as indicated by the following figures:—

Year.	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903
Notified Cases ...	2995	1466	1418	1614	1788	2964	3389	1929	1320	1255	2063	3314	5044	**2835**
Deaths ...	209	91	68	68	75	133	154	95	47	29	93	156	293	**144**
Percentage Mortality	7·0	6·2	4·8	4·2	4·2	4·5	4·5	4·9	3·6	2·3	4·5	4·7	5·8	**5·1**

Scarlet Fever in Wards.

The number of notified cases of Scarlet Fever and the sickness rate per 1,000 of the population in each ward is shown in the following table:—

SCARLET FEVER.

Ward.	Cases notified.	Sickness rate per 1000.
Rotton Park	303 ...	6·46
All Saints'	214 ...	5·08
Ladywood	122 ...	4·83
St. Paul's	51 ...	3·28
St. George's	97 ...	4·75
St. Stephen's	93 ..	3·92
St. Mary's	44 ...	2·71
St. Bartholomew's	117 ...	4·41
Market Hall	46 ...	4·85
St. Thomas'	91 ...	4·90
St. Martin's	98 ...	4·09
Edgbaston and Harborne ...	89 ...	2·84
Deritend	118 ...	4·91
Bordesley	402 ...	7·07
Duddeston	102 ...	4·34
Nechells	179 ...	5·31
Balsall Heath	269 ...	6·84
Saltley	347 ...	7·64

Scarlet Fever cases removed.

Of the 2,835 cases, 2,455 were removed to hospital, equal to 87 per cent. This percentage of removal compares as follows with that in the previous ten years:—

PERCENTAGE OF CASES REMOVED TO HOSPITAL.

	Cases Reported.	Cases Removed.	Percentage.
1893 ...	1614 ...	1339 ...	83 %
1894 ...	1788 ...	1539 ...	86 %
1895 ...	2964 ...	2595 ...	88 %
1896 ...	*3389 ...	*2812 ...	83 %
1897 ..	1929 ...	1641 ...	85 %
1898 ...	1320 ...	1083 ...	82 %
1899 ...	1255 ...	1052 ...	84 %
1900 ...	2063 ...	1814 ...	88 %
1901 ...	3314 ...	2959 ...	89 %
1902 ...	*5044 ...	*4534 ...	90 %
1903 ...	2835 ...	2455 ...	87 %

*53 weeks.

Precautions against Scarlet Fever.

The great epidemic which has now gone was not of a very fatal type. The reduction in severity appears to be due to a general lowering of the morbidity of the disease everywhere in this country, rather than to an improvement in the methods of treatment in hospital or at home. There

Precautions against Scarlet Fever—(*continued*).

has been going on for a long series of years a gradual reduction in the death-rate from Scarlet Fever, as is indicated in the accompanying chart.

The fact that we have so recently had the most extensive epidemic ever recorded makes it necessary to enquire if our information as to the etiology of the disease and the methods of its spread are sufficiently accurate, and consequently whether the preventive measures adopted are adequate.

Briefly stated, Scarlet Fever has been regarded as a germ disease spread chiefly by discharges from the throat, nose, and ears, and by the fine particles of skin given off at the period of desquamation. It is assumed that in each of these the living germ is capable of being carried to a susceptible individual, and it is difficult to estimate which of them plays the most important part in the spread of the disease.

With a general recognition of these features, commonsense has indicated that the two most essential methods of prevention are separation of infectious persons and complete disinfection of everything which has come in contact with them.

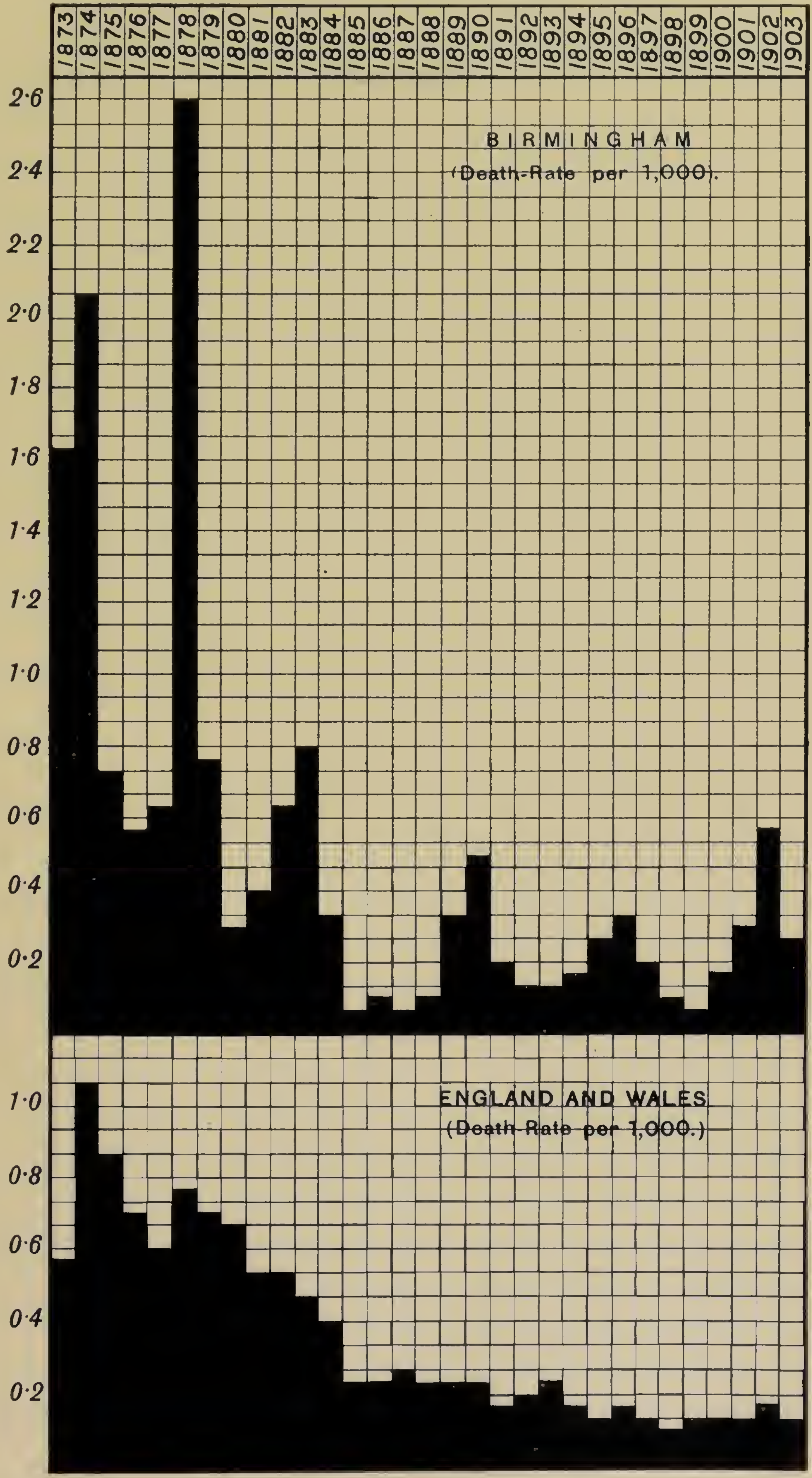
Both of these methods have been put into operation in Birmingham in a very thorough manner for a long series of years with, it must be admitted, disappointing results so far as the epidemic prevalence of the disease is concerned.

A considerable amount of investigation work has been undertaken during recent years with a view to isolating the germ of Scarlet Fever, but it is as yet extremely doubtful whether any one of the germs already described is the actual cause of Scarlet Fever. It is in the meantime desirable, therefore, to act on the assumption that we have to deal with a disease due to some living organism, of which we are as yet quite in the dark.

In working with germ diseases due to unknown organisms it cannot be too strongly emphasised that great error has been found to exist in the past as a result of treating all of them on exactly the same lines. Each disease-producing organism has its own characteristics, and differs in its methods of spread as widely from its fellows as do the species in the higher orders of the animal or vegetable kingdoms. As examples of diseases which were dealt with by erroneous methods until quite recently may be mentioned—(1) Yellow Fever—a disease which was

CHART No. 4.

Death-Rate from Scarlet Fever, 1873—1903.



looked upon until three years ago as one of the most infectious diseases known, and one in which isolation and disinfection were all important. It is now known that the infection can only be carried by one means, and that if proper precautions are taken to deal with this the complete suppression of the disease is both possible and practicable. The former type of isolation and disinfection has been demonstrated to be almost without value. (2) Plague is another example of a disease spread by unsuspected agencies. Here it has been abundantly proved that isolation and disinfection are not sufficient unless at the same time the disease in the rat is dealt with. (3) An even better example is that of Diphtheria—a disease somewhat closely related to Scarlet Fever. In this disease it is now possible to isolate the germ which causes Diphtheria, and to study its peculiarities. Such study has abundantly demonstrated the hitherto unthought-of result that many persons are able to grow the germ in their throats without themselves suffering any apparent inconvenience. Such persons go about their ordinary duties and act as distributors of Diphtheria infection. They very largely account for many of the cases of Diphtheria whose origin could not formerly be traced. If the patients suffering from recognisable diphtheria are alone dealt with by isolation and disinfection, it is obvious that there is little chance of preventing the spread of infection with any degree of precision.

In the case of Scarlet Fever there is little doubt that in the present state of our knowledge of this ever-prevalent disease separation of the sick from the healthy and early and complete disinfection of everything which comes in contact with the patient are the two most important indications. It must, however, be recognised that we as yet know nothing of the life history of the infecting organism, and therefore are unable to devise the most suitable means of checking its spread. Statistical, clinical, and biological research are still much needed in this common disease.

DIPHTHERIA.

Diphtheria.

Eight hundred and eighty-four cases of sickness from this disease were notified during the year, equal to a sickness rate of 1·66 per 1,000 of the population. This is a larger case rate than has occurred in any year since 1896. One hundred and thirty-five deaths occurred giving a case-mortality rate of 15 per cent. The following table shows the number of cases notified, the number of deaths, and the case-mortality rate for each year since 1892. It will be seen that the case-mortality rate for last year was relatively a low one. This is partly due to the use of anti-toxin, and also to the prevalence of a milder type of the disease.

DIPHTHERIA.

	Cases notified.	Deaths registered.	Case-mortality per cent.
1892	533	102	19
1893	387	83	21
1894	406	91	22
1895	741	214	29
1896	*1194	*293	25
1897	713	160	22
1898	689	132	19
1899	720	147	20
1900	542	77	14
1901	533	85	16
1902	*787	*130	17
1903	884	135	15

*53 weeks.

Diphtheria and anti-toxin.

Applications were made for anti-toxin for the use of 303 persons, a few of whom did not belong to Birmingham, but were being treated at one of our hospitals. It appears, therefore, that the Sanitary Authority supplied anti-toxin to less than 35 per cent. of the Birmingham cases. Anti-toxin is supplied for all classes of the community, and apparently is actually used as much among the higher as among the poorer classes. As an indication of the general distribution of its use, the following figures are set out, showing the persons for whom anti-toxin was sent, the total number of cases notified, and the sickness-rate per 1,000 in each ward.

	Cases notified.	Sickness rate per 1000.	Persons for whom anti-toxin was sent.
Rotton Park	98	2·09	37
All Saints'	68	1·62	22
Ladywood	58	2·30	18
St. Paul's	27	1·74	4
St. George's	41	2·01	9
St. Stephen's	35	1·48	5
St. Mary's	9	0·55	1
St. Bartholomew's	64	2·42	18
Market Hall	8	0·84	0
St. Thomas'	36	1·94	14
St. Martin's	30	1·25	6
Edgbaston and Harborne	16	0·51	15
Deritend	48	2·00	18
Bordesley	92	1·62	50
Duddeston	33	1·40	7
Nechells	40	1·19	7
Balsall Heath	44	1·12	14
Saltley	132	·91	40

The percentage mortality of 15 indicates pretty clearly that anti-toxin is not being used as extensively as it ought to be at an early stage of the disease. Parents of young children put off sending for medical advice until too late, and even when anti-toxin is used in such cases the best results are not obtained. It cannot be too strongly urged that it is advisable, even in cases of doubtful Diphtheria, to give anti-toxin freely at the earliest possible stage. If this were generally done the mortality would probably fall to not more than 5 per cent.

Diphtheria is one of a group of diseases mainly spread by personal contact. It seldom, if ever, is due to insanitary conditions, although the virulence of the disease may be increased by such conditions. In Birmingham for many years past it has attacked the wards in the City more or less evenly.

Diphtheria and hospital accommodation.

The hospital provision for Diphtheria is unsatisfactory at the present time. As an acute infectious disease it is desirable that Diphtheria should be separated from non-infectious cases, and it is also very important that some hospital accommodation should be provided, because surgical interference may be necessary in certain cases at any stage of the disease. The treatment of severe cases of Diphtheria at one of the City hospitals is much to be desired. During 1903 several appeals were made to have cases removed to hospital. The undertaking given by the Health Committee to treat cases of Diphtheria at Little Bromwich Hospital will be of real value.

Diphtheria and schools.

Several times during the year it became evident that schools were spreading the disease. In each instance the recommendations made were readily acceded to by the school authorities, and the prevalence of the disease in each case rapidly subsided.

WHOOPING-COUGH.

Wh ooping couhg.

The deaths from Whooping-cough were fewer in number during 1903 than in any previous year. The average yearly number of deaths in the previous ten years was 254, while last year there were only 93. Thirty-seven of the deaths were of infants under one year of age, 51 were of children between one and five years, and only 5 deaths were in persons over five years of age. This disease, along with measles and diarrhœa, is one of the most fatal diseases in children. Most of the deaths, too, from Whooping-cough could be prevented with a little care.

TYPHOID FEVER.

Typhoid Fever

Three hundred and forty-eight cases of Typhoid Fever were reported during 1903, as compared with 544 in the previous year. This gives a sickness rate of ·65 per 1,000 of the population per annum. Sixty-six deaths were registered during the year, giving a death-rate of ·12 per 1,000. The year 1903 has been a favourable one so far as the absence of typhoid infection is concerned. In the following table is shown the number of cases notified, the number of deaths, and the percentage mortality in each of the ten preceding years :—

Years ...	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903
Notified Cases	489	511	436	483*	533	637	779	851	615	544*	348
Deaths ...	94	105	82	108*	89	113	119	179	111	100*	66
Percentage Mortality	19	21	19	22	17	18	15	21	18	18	19

*53 weeks.

"Fever" in large towns.

The mortality-rate per thousand from Fever in the six largest towns is shown in the following figures for comparative purposes :—

London	·09
Liverpool	·23
Manchester	·17
Birmingham	·13
Leeds	·13
Sheffield	·11
Bristol	·06

In all these towns the rate for 1903 was a specially low one. So far as Birmingham is concerned the rate for 1903 was lower than in any year except 1892. This low rate was undoubtedly due mainly to the fact that the year was cold and wet throughout.

Typhoid Fever and temperature and rainfall.

In the following table is set out the death-rate and sickness-rate from typhoid fever in Birmingham in each year, together with the mean temperature of the air during the third quarter of the year, and the total rainfall for the year :—

	TYPHOID FEVER.		Mean Temperature 3rd Quarter.	Rainfall for year.
	Death-rate.	Sickness-rate.		
1887	·17	—	58·9	19·80
1888	·14	—	55·7	24·62
1889	·09	—	57·6	24·94
1890	·14	·66	57·9	22·10
1891	·18	·93	57·4	31·14
1892	·08	·54	56·7	25·60
1893	·19	1·00	59·7	20·76
1894	·21	1·04	56·1	25·52
1895	·17	·88	59·2	24 89
1896	·21	·95	57·4	22·27
1897	·18	1·06	58·0	28·21
1898	·22	1·25	58·3	20·45
1899	·23	1·52	60·4	25·12
1900	·35	1·64	59·6	29·09
1901	·21	1·18	60·1	22·64
1902	·19	1·01	56·6	25·98
1903	·12	·65	56·8	33·83

Typhoid Fever in Wards.

The subjoined statement shows the sickness rate from Typhoid Fever in each ward of the City:—

Rotton Park	·47	per 1000
All Saints'	·47	,,
Ladywood	·44	,,
St. Paul's	·71	,,
St. George's	·44	,,
St. Stephen's	·59	,,
St. Mary's	·86	,,
St. Bartholomew's	·79	,,
Market Hall	·32	,,
St. Thomas'	·54	,,
St. Martin's	·46	,,
Edgbaston and Harborne	·58	,,
Deritend	1·21	,,
Bordesley	·65	,,
Duddeston	1·15	,,
Nechells	·98	,,
Balsall Heath	·51	,,
Saltley	·66	,,

Typhoid Fever cases removed.

Of the total number of cases notified, 165 were removed to hospital. Of these 70 were taken to the General Hospital, 38 to the Workhouse Infirmary, 24 to the Queen's Hospital, 19 to the Children's Hospital, and 14 to the City Hospital. Seven other cases occurred in public institutions, from which they were not removed. During the time when there was pressure on the hospital accommodation, caused by the epidemic of Scarlet Fever, it was impossible to treat cases of Typhoid Fever at the City Hospital. As, however, the prevalence of this latter disease declined, accommodation was made for Typhoid Fever patients at Little Bromwich Hospital. The work done by the General Hospital in setting aside special accommodation for Typhoid cases was very much appreciated in the City, and was gratefully acknowledged in a letter sent to the Governors of the Hospital by the Health Committee on November 25th. It is most important that accommodation should always be available for those cases of Typhoid Fever which cannot possibly be nursed at home, and with the increased accommodation now being provided at Little Bromwich it is probable that little difficulty will be met with in the future in this respect.

Widal's Test.

The Pathological Department at the University examined 107 specimens of blood for the typhoid reaction. Facilities for this means of accurate diagnosis ought to be much more extensively taken advantage of than is indicated by the above figure.

DIARRHŒA.

Diarrhœa.

The late Dr. Ballard, when Medical Inspector to the Local Government Board, was one of the first to emphasise the fact that the disease commonly known as Summer Diarrhœa is specific, with definite symptoms and a well-marked course, and that its cause is probably as definite as that of Scarlet Fever, Measles, or any of the other infectious diseases. Unfortunately, it is somewhat difficult to distinguish some of the cases from allied diseases, and, as a result, a number of deaths are returned every year as due to Enteritis and other diseases which ought to be returned as Epidemic Diarrhœa.

In the chart on the opposite page is shown the number of deaths during each fortnightly period since the year 1900. This chart gives a good idea as to the relative prevalence of the disease in each of the four years. It also indicates the time of the year when the disease was prevalent.

Five hundred and eighty-eight deaths were due to Epidemic Diarrhœa during 1903, and 136 deaths were registered as Enteritis, making a total of 724 The average number of deaths during the ten years 1893-1902 was 977 each year, or an average of 253 more than occurred during 1903.

Diarrhœa and temperature and rainfall.

In the following table is shown the number of deaths from Diarrhœa and Enteritis in each year since 1887, and also certain other figures in regard to temperature and rainfall :—

	Deaths during each year from					
	Diarrhœa.	Enteritis.	TOTAL.	Mean Temperature.	3rd Quarter Rainfall in inches.	Days when ·010 inch or more of rainfl.
1887 ...	550	60	610	58·9	5·62	31
1888 ...	305	60	365	55·7	9·58	49
1889 ...	465	56	521	57·6	6·62	39
1890 ...	434	101	535	57·9	7·39	42
1891 ...	320	107	427	57·4	7·27	48
1892 ...	443	104	547	56·7	9·22	41
1893 ...	828	200	1028	59·7	5·61	46
1894 ...	256	148	404	56·1	7·18	45
1895 ...	605	282	887	59·2	6·45	44
1896 ...	589	309	898	57·4	7·33	47
1897 ...	923	521	1444	58·0	7·24	35
1898 ...	668	544	1212	58·3	4·50	21
1899 ...	831	580	1411	60·4	4·98	34
1900 ..	613	409	1022	59·6	5·43	31
1901 ..	792	206	998	60·1	5·91	26
1902 ...	412	122	534	56·6	7·51	47
1903 ...	588	136	724	56·8	9·85	49

The relationship between the mean temperature of the air during the third quarter and the prevalence of fatal Diarrhœa is very close : the chart No. 6 shows this even more strikingly than the table. It will be seen that the autumn of the year 1903 was relatively a cool one. In addition, however, to being a cold autumn, it was one with a higher rainfall than any other during the 17 years. The number of rainy days also was large. To a great extent temperature and the absence of rainfall govern the prevalence of this commonly fatal disease in any community.

CHART No. 5.

Deaths from Diarrhœa and Enteritis in each Fortnight of the Years 1900, 1901, 1902, 1903.

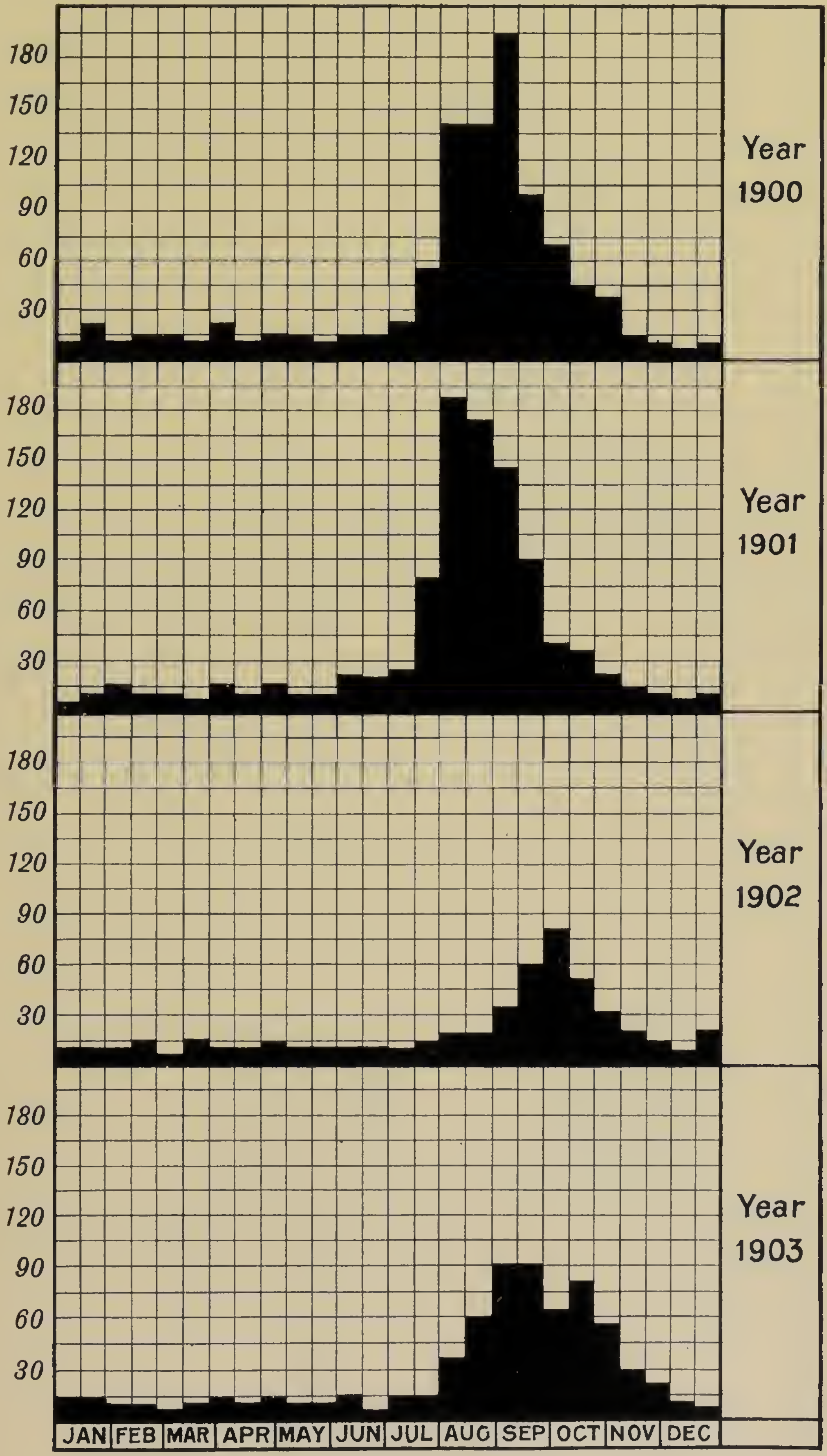
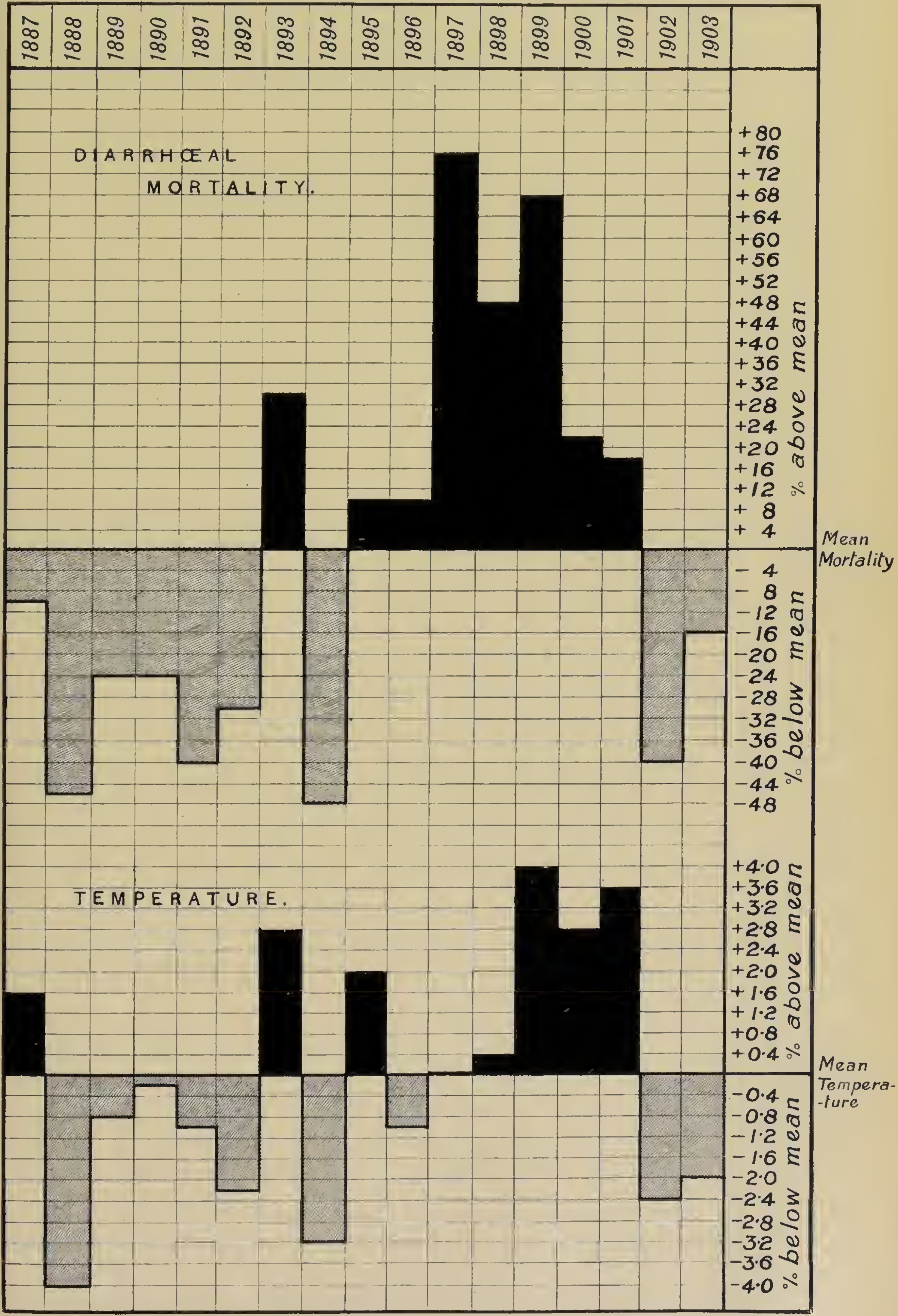


CHART No. 6.

Annual Death-Rate from Diarrhœa and Enteritis and Mean Temperature in Summer Quarter.



The important point to bear in mind, however, is the means by which temperature and dryness of the atmosphere are capable of operating. There seems now to be no doubt whatever that temperature and moisture act in enabling the germs of various kinds which set up Epidemic Diarrhœa to multiply in organic matter in all sorts of situations. These germs are liable to multiply at an enormous rate, provided the temperature is suitable for them, in organic matter in soil such as that which exists in unpaved yard surfaces near dwelling houses, and in privies of various kinds, as well as in any kind of otherwise clean organic matter, such as milk and other foods.

Diarrhœa and organic filth.

The prevention of Summer Diarrhœa largely depends upon the principle of preventing any accumulation of unnecessary organic matter near dwelling houses, and in taking every precaution to prevent milk and other foods (organic matter) from becoming contaminated. The work of the Corporation in doing away with insanitary pan privies, in removing solid refuse at short intervals from dwelling houses, in cleansing streets, and in requiring that unpaved yard surfaces should be covered with some impervious material, is among the most important preventive measures which can be taken by the municipality.

A great deal can be done by parents to prevent their infants from contracting Summer Diarrhœa, and the work of instruction carried out by the Women Health Visitors is an important adjunct to the Corporation's preventive measures against Epidemic Diarrhœa. It is impossible to get the best results from municipal work unless parents exercise proper care in feeding their susceptible young children.

Diarrhœa and food.

Early last summer a large number of leaflets on the prevention of Epidemic Diarrhœa was sent to the elementary schools to be given to the older scholars. In addition large posters were placed in prominent positions in the districts usually most attacked by this disease.

OTHER ZYMOTIC DISEASES.

Influenza caused 63 deaths, as compared with the following numbers in the previous ten years :—

Influenza.

1893	123
1894	29
1895	121
1896	41*
1897	59
1898	89
1899	150
1900	185
1901	90
1902	76*
1903	63

*53 weeks.

Erysipelas.

Erysipelas caused 22 deaths among 644 cases of sickness from this disease notified. In previous years the notifications and deaths from Erysipelas were as follows:—

	Cases.	Deaths.
1893	852	24
1894	772	15
1895	818	22
1896	782*	21*
1897	585	21
1898	637	15
1899	629	21
1900	678	26
1901	726	23
1902	762*	30*
1903	644	22

*53 weeks.

Puerperal Fever.

Puerperal Fever was accountable for 21 deaths among 31 cases of sickness notified. In addition to the 21 deaths from Puerperal Fever, there were 43 deaths due to accidents and diseases of parturition, so that 64 mothers died in child-bed from various causes during the year, *i.e.*, one to every 264 births, or one to every 803 if Puerperal Fever alone is taken.

The number of notified cases of Puerperal Fever, the number of deaths from the disease, and the number of deaths from accidents of child-birth are set out in the accompanying table for the past ten years:—

	Puerperal Fever.		Accidents of Childbirth.
	Cases.	Deaths.	Deaths.
1894	42	18	48
1895	24	15	43
1896	31*	21*	50*
1897	17	9	41
1898	24	14	60
1899	30	14	63
1900	39	26	55
1901	32	28	45
1902	35*	22*	37*
1903	31	21	43

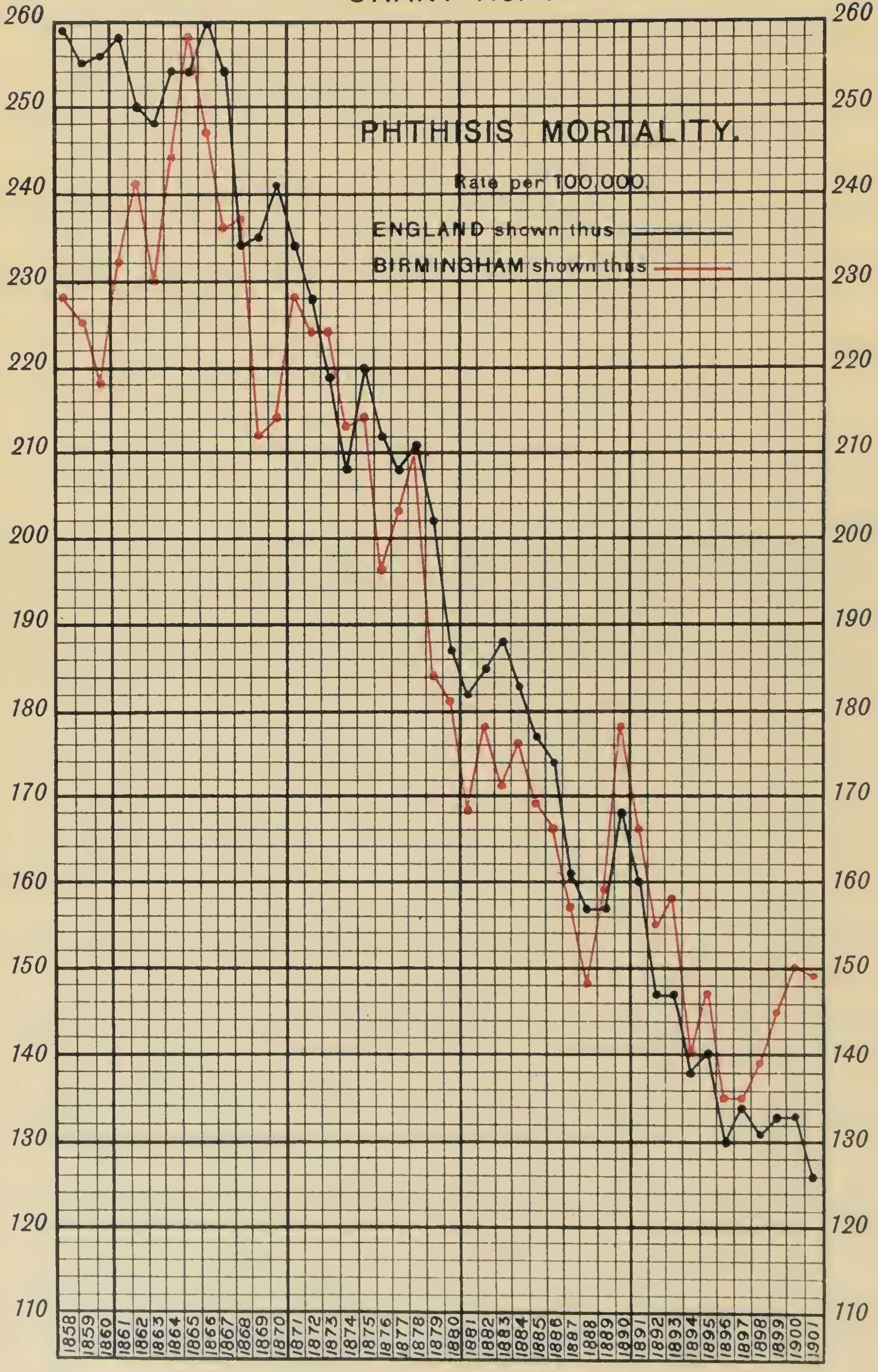
*53 weeks.

TUBERCULAR DISEASES.

Tubercular diseases.

The number of deaths from these infectious diseases during 1903 was 1025, as against 1,093 in the previous year. In the accompanying table is given the number of

CHART No. 7.


PHTHISIS MORTALITY.
Rate per 100,000.
ENGLAND shown thus
BIRMINGHAM shown thus
260
250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
1858
1859
1860
1861
1862
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1894
1895
1896
1897
1898
1899
1900
1901

deaths from each of the chief forms of tubercular disease for each of the previous ten years, together with the mortality-rate in each year:—

DISEASE.	1893.	1894.	1895.	*1896.	1897.	1898.	1899.	1900.	1901.	*1902.	1903.
Abdominal Tuberculosis ..	66	47	66	61	57	64	78	104	131	92	113
Tubercular Meningitis ...	63	68	94	76	79	102	63	56	88	63	73
Phthisis	775	630	718	694	679	718	841	847	903	874	754
Other forms of Tuberculosis ...	141	114	127	121	122	70	96	71	83	64	85
Total deaths ...	1045	859	1005	952	937	954	1078	1078	1205	1093	1025
Mortality rate ...	2·15	1·75	2·02	1·87	1·86	1·87	2·10	2·08	2·30	2·04	1·93

*53 weeks.

There seems to be practical unanimity among persons who have carefully studied the subject that few, if any, are born with the germ of the disease in them, and that in nearly all cases infection is received from some previous case. But in addition to the necessity of receiving the active infecting agent—the germ of Tuberculosis—it is necessary also to have a susceptible constitution. These two conditions are probably of equal importance in dealing with the subject of the prevention of Tuberculosis. Much has been done in regard to lessening the number of susceptible people during the past fifty years by municipalities and by the Government in securing better houses, better sanitary surroundings, better food supplies, and better conditions of work. Until a few years ago, practically nothing was done to prevent the infectious cases from spreading broadcast their infection, so that the good results that have been obtained have been almost entirely due to the bettering of the conditions under which people live and work.

Precautions against Consumption.

Chart No. 7 shows the death-rate from one of the principal tubercular diseases—phthisis—in England and Wales, and in the registration districts of Birmingham, Aston, and King's Norton since 1856. The chart demonstrates in a very remarkable manner the splendid results which have already been achieved. These results, however, were obtained without any direct effort towards the prevention of this disease. There is every probability of direct effort still further reducing the mortality from this most serious of all preventable diseases. As regards direct measures leaflets have been widely distributed in Birmingham for several years past pointing out the necessity for care on the part of consumptives, so that they shall not spread the infection to others. Notices have also been distributed in workshops, lodging houses, public houses, tramcars, and other public places of resort, pointing out the danger of the unnecessary habit of spitting on the floor. In addition, notices have been posted on lamp-posts and in other prominent places in the City cautioning persons against this filthy habit. The Health Visitors in their daily work have, as part of their duty, to systematically visit all cases of Tuberculosis which they come across. Unfortunately, we have no means of ascertaining where consumptives reside other than from the visits of the Women Health Visitors. It is probable that the majority of consumptives escape notice at the present time until their death is reported by the Registrar. There are in Birmingham at any one time probably at least 3,000 cases of Phthisis. The Health Visitors in their visits during 1903 ascertained the existence of 332 cases. It seems, therefore, highly desirable that some better method of ascertaining where consumptives reside should be obtained, and experience indicates that a form of voluntary notification is the best means we have for this at the disposal of the Corporation at present. Such a form of notification would enable the Sanitary Authority to give particular instruction in the methods of preventing the spread of infection to the persons who are really capable of spreading it.

No arrangement has yet been made in this City to enable consumptives of the poorer class to obtain curative treatment in sanatoria. In a large City like Birmingham there are possibly at one time several hundreds of consumptives who could be permanently cured if suitable means were provided. Much discussion has taken place throughout the world within the past few years as to the percentage of cases which are suitable for being sent to sanatoria, and much confusion exists in the mind of the medical profession and of the public in regard to the matter. This arises chiefly from the fact that the sanatoria which are in existence admit patients on payment of a fee, or on the recommendation of the subscriber. The result is that all classes of consumptives are sent to sanatoria except, perhaps, the most advanced cases, with the result that a large percentage of them do not permanently benefit from treatment. In addition to a sanatorium for the curative treatment of consumptives, it may at some time be necessary to provide accommodation for those cases of Pulmonary Tuberculosis which are in a highly infecting condition, and where proper accommodation cannot be obtained at their homes.

DISINFECTION.

Disinfection

The work done by the staff of disinfectors was considerable during the year owing to the number of cases of Scarlet Fever which had to be dealt with, and also to the number of cases of Small-pox. A solution of chloride of lime was mainly employed in spraying walls as being the most efficient cheap disinfectant there is. Beds and other articles have been disinfected principally by heat at the disinfecting station. The work done by the staff is as follows :—

	1901	1902	1903
Houses disinfected after Small-pox	0	67	229
,, ,, ,, Puerperal Fever ...	21	29	27
,, ,, ,, Scarlet Fever	2703	4355	2410
,, ,, ,, Diphtheria and Croup ...	270	527	656
,, ,, ,, Typhoid Fever	456	486	309
,, ,, ,, Consumption ...	345	490	461
,, ,, ,, Measles	103	67	89
Beds and Mattresses disinfected	4234	6583	5215
Sheets, Blankets, and Counterpanes disinfected ...	10046	15884	12182
Pillows and Bolsters disinfected	7395	11215	7730
Garments disinfected	12809	23685	27706
Carpets disinfected	559	1127	1469
Other Articles disinfected	1595	3238	5654

DISEASES OF ANIMALS COMMUNICABLE TO MAN.

Contagious diseases of animals.

A considerable number of diseases among the lower animals are communicable to man. Fortunately, no such case of infection was reported during 1903, so far as the more serious of these diseases are concerned. It is necessary, however, in such a statement to exclude tuberculosis, as it is almost impossible to obtain evidence of infected animals spreading this disease to man, on account of the long " incubation " period.

Mr. Malcolm, the Veterinary Inspector, has supplied the following information in regard to the prevalence of communicable diseases in 1903.

" I herewith send you a note on the occurrence of the scheduled contagious diseases of animals transmissible to man for the year 1903.

Glanders.

" *Glanders and Farcy.*—Twenty-four cases of this disease occurred in 1903. This is above the average in preceding years, but the increase coincided with a general increase in the country. As a considerable number of the cases in Birmingham occurred in stables containing either one horse or two or three horses, where there had been no previous case of glanders or any new horses introduced, the sources of infection were in all probability outside, either in contaminated water-troughs or in in-contact latent cases at work. With the view of diminishing the sources of infection the water-troughs were closed—a procedure which the horse-owners generally commended. At the same time, it is certain that the great source of infection to healthy studs is the purchase of horses with latent disease drafted out of infected studs.

"Under existing regulations there is no real check on the sale of horses with the latent disease, which seems therefore not unlikely to remain permanently in the country. Under regulations conferring power of compulsory malein testing of all horses in infected stables with reasonable compensation uniformly in force, the disease could be almost, if not entirely suppressed. It was noticed, when dealing with the cases which occurred, that one or two of the stable attendants with abrasions on their hands ran grave risks of contracting the disease. All were warned of the danger, and fortunately no case has occurred in man.

Anthrax.

"*Anthrax.*—Whilst, according to the official returns, anthrax showed a distinct increase in the country in 1903, no case occurred in this city, and, with the exception of one doubtful carcass which was submitted for inspection and was condemned as unfit for food and subsequently cremated, there is no evidence that any meat affected with anthrax was sent into the city. This must be considered very satisfactory, for the danger to human life in dealing with anthrax meat is very great, especially so for those who dress the carcasses. The cause of the increase of this disease, notwithstanding the efforts of the Board of Agriculture to suppress it, is on high authority ascribed, at least in part, to the importation of contaminated foods from infected countries. If this view is correct, the hope of lessening, far less exterminating, the disease must be small, and there seems therefore no prospect that the necessity for special vigilance on the part of the inspectors is likely to be lessened.

Rabies

"*Rabies.*—No case of rabies occurred in the country in 1903, and at the present this disease seems to be stamped out. Several dogs showing more or less symptoms were submitted for examination, but in only one case was there any doubt. In that case it was deemed advisable, in accordance with the instructions of the Board of Agriculture, to send the dog's head to them in London for test inoculation. The Board subsequently declared the case not rabies.

Epizootic
Lymphangitis.

"*Epizootic Lymphangitis.*—This disease of horses, recently introduced from South Africa, chiefly by returned army horses, has been scheduled as a contagious disease by the Board of Agriculture, and a special order dealing with it issued by them. No case has been observed in Birmingham. Authorities having experience of the disease in South Africa state that there is every reason to believe that it is transmissible to man."

HOUSING OF THE WORKING CLASSES ACT.

Housing of the Working Classes.

No report on the health of a city can be complete without a statement regarding the work done to improve the condition of the houses of the labouring classes. The method adopted in Birmingham is somewhat different to that in operation in many other towns, and therefore a short description of it may be necessary. Briefly, it is as follows.

Where a house or group of small houses is found to be in a condition unfit for human habitation proceedings are taken under Part II. of the Housing of the Working Classes Act, and an effort is made to get the owner to so substantially repair the property as to make it habitable, in order to retain a supply of good houses at a rental which could not obtain were the houses pulled down and rebuilt. The work of repairing has consisted mainly (1) in putting in damp courses all round the external walls of the house and in the internal walls, (2) in covering the ground on which the house stands with a layer of concrete on which the flagging of the kitchen rests so as to prevent damp, (3) in removing decayed ceilings, whitewashing the cavity and re-ceiling, (4) in thoroughly repairing or renewing the woodwork of floors, windows, doors, etc., (5) in thoroughly repairing the roof, and (6) in providing proper water-closet and ashbin accommodation. In certain cases, where walls have been found to be so badly bulged or defective that they could not be repaired, it has been necessary to take down the wall of part of the house.

Houses unfit for habitation

As this plan is at present carried out in Birmingham, a large amount of time is occupied by the Medical Officer of Health in personally inspecting the houses. During 1903, the following houses were represented as unfit for human habitation by the Medical Officer of Health, after a careful inspection in each case:—

1 Court, Brewery Street	7 houses
3 Court, Manchester Street	3 ,,
139, 140 and 141 New John Street	4 ,,
Coventry Place, Coventry Street	4 ,,
1 Court, Newdegate Street	6 ,,
7 Scott Street	1 ,,
Richmond Terrace, Ashley Street... ...	3 ,,
Back of 6 Bull Ring	5 ,,
10 Court, St. George's Street	4 ,,
15 Little Edward Street	1 ,,
12 Court, Bartholomew Street	5 ,,
37 Court, Brearley Street	6 ,,
Back of 164 New John Street	2 ,,
104, 105 and 106 Coventry Street	3 ,,
Warwick Place, Coventry Street	4 ,,
29 Spooner Street	1 ,,
13 Court, Angelina Street	2 ,,
Lincoln Place, Garrison Lane	7 ,,
35 Court, Farm Street	4 ,,
Back of 3 Moore's Row	3 ,,
17 Court, Francis Street	1 ,,

Houses unfit for habitation—(*continued*).

19 Court, Bordesley Street	1	house
Back of 3 Oxford Street	1	,,
Back of 35 Montague Street	1	,,
Back of 214 and 215 Bradford Street	2	,,
1 Court, Little Edward Street	2	,,
Back of 102 Digbeth	4	,,
22 Court, Hampton Street	2	,,
Back of 53 New John Street	1	,,
54 and 55 New John Street	2	,,
10 Court, Lower Tower Street	12	,,
Back of 80 Aston Road	10	,,
Back of 6 and 7 Earl Street	2	,,
235 Aston Road	1	,,
1 Court, Jennens Row	1	,,
26, 27, 28 and 29 Allison Street	4	,,
Back of 4 and 5 Coventry Street	6	,,
40, 41, 42, 43 and 44 Lister Street	5	,,
18, 19, 20 and 21 Park Lane	4	,,
Back of 19 Park Lane	1	,,
Back of 21 Park Lane	1	,,
51 Court, Summer Lane	8	,,
1 Court, Brass Street	3	,,
3 Court, Brass Street	4	,,
21 Court, Moor Street	9	,,
90, 91 and 92 Moor Street	3	,,
Victoria Terrace, Dartmouth Street	1	,,
14 Court, Adams Street	1	,,
8 Court, Adams Street	2	,,
Back of 34 Adams Street	1	,,
13 Court, Digbeth	1	,,
6 Court, Richard Street	4	,,
5 Court, Richard Street	4	,,
1 Court, Clyde Street	6	,,
Back of 8 Fawdry Street	1	,,
7 Court, Warwick Street	3	,,
Lilly Crescent, Derby Street	2	,,
33 Court, Brearley Street	9	,,
51 Court, Summer Lane	2	,,
7 Court, New John Street	6	,,
5 Court, Blews Street	1	,,
14 Court, New John Street	4	,,
1 Court, Blews Street	2	,,
6 and 7 Earl Street	2	,,
47, 51, 53 and 55 Dartmouth Street	4	,,
22 Court, Aston Road	5	,,
4 Court, Jennens Row	4	,,
4 and 5 Coventry Street	2	,,
3½ Court, Meriden Street	3	,,
Garden Walk, Long Acre	7	,,
Back of 18 Park Lane	2	,,
Back of 20 Park Lane	1	,,
2 Court, Gosta Green	7	,,
1 Pope Street	1	,,
2 Court, Brass Street	7	,,
6 to 11 Brass Street	6	,,
1 Heuns Walk	1	,,
5 Court, Ellis Street	3	,,
34 Court, Lawley Street	16	,,
12 Court, Adams Street	1	,,
34 Adams Street	1	,,
4 Court, Adams Street	3	,,
72, 74, 76, 78, 80, 82 and 84 Dartmouth Street ...	7	,,
30, 31 and 32 Richard Street	3	,,
26 and 27 Richard Street	2	,,
Total ...	304	

The following is a list of properties rendered habitable during the year 1903:—

Houses made fit for habitation.

Property.	No. of houses.	Date when habitable.
15 Court, Gt. Barr Street	2	March 4th, 1903.
131, 133 and 135 Dartmouth Street, and 2, 4, 8, 12, and house adjoining 12 in Lord Street	8	March 4th, 1903.
Back of 8 Bishopsgate Street	1	Mar. 18th, 1903.
No. 5 and house back of 7 Bishopsgate Street	8	Mar. 18th, 1903.
No. 3 and 2 houses in Eli Place, Richard Street	3	Mar 18th, 1903.
67 Adams Street	1	Mar. 18th, 1903.
16 Gt. Lister Street	1	April 1st, 1903.
58, 64, 66 Lord Street	3	April 1st, 1903.
17 to 23a Lord Street	5	April 1st, 1903.
1 Court, Dartmouth Street	17	April 29th, 1903.
35 Gt. Lister Street	5	April 29th, 1903.
1 back of 260 Gt. Lister Street ...	1	April 29th, 1903.
7 Court, Gt. Barr Street	4	April 29th, 1903.
Back of 164 New John Street... ...	2	April 29th, 1903.
4 Court, Bartholomew Street	3	April 29th, 1903.
Back of 98 Adams Street	4	April 29th, 1903.
34 Love Lane	1	April 29th, 1903.
7 Court, Stoke Street	4	June 1st. 1903.
9 Court, Lower Tower Street	8	June 1st, 1903.
3 and 4 Courts, Oxford Street... ...	21	June 1st, 1903.
50 and 52 Adams Street	2	June 29th, 1903.
Back of 8 Fawdry Street	1	June 29th, 1903.
13 Court, Gt. Barr Street	6	June 29th, 1903.
14 Court, Gt. Barr Street	4	June 29th, 1903.
35 Court, Farm Street	4	Sept. 16th, 1903.
44 Court, Windsor Street	6	Sept. 16th, 1903.
Lord Street and Windsor Street ...	6	Sept. 16th, 1903.
12 Court, Bartholomew Street ...	6	Sept. 16th, 1903.
10 Court, St. George's Street	4	Sept. 16th, 1903.
17 Court, Adams Street	7	Sept. 16th, 1903.
6 Court, Dartmouth Street	5	Nov. 18th, 1903.
51 Court, Summer Lane	2	Dec. 2nd, 1903.
Total ...	155	

In addition to the above, the following properties were repaired without notice:—

	No. of houses.	Date.
Lord Street and Windsor Street ...	8	Sept. 16th, 1903.
Back of 98 Adams Street	15	June 1st, 1903.
7 Court, Stoke Street	4	June 1st, 1903.
35 Court, Farm Street	9	Sept. 16th, 1903.
3 and 4 Courts, Oxford Street ...	7	June 1st, 1903.
44 Court, Windsor Street	6	Sept. 16th, 1903.
10 Court, St. George's Street	7	Sept. 16th, 1903.
17 Court, Adams Street	9	Sept. 16th, 1903.
6 Court, Dartmouth Street	12	Nov. 18th, 1903.
Total ..	77	

Houses closed.

During the year 65 Closing Orders were obtained with regard to the following properties:—

	No. of houses.	Date.
54 and 56 Adams Street	2	March 6th, 1903.
1, 2, 4, 6, 7 and 8, in 44 Court, Windsor Street	6	Mar. 20th, 1903.
24 Adams Street	1	Mar 27th, 1903.
28, 30, 32 and 36 Adams Street ...	4	Mar. 27th, 1903.
2, 3, 4, 5 and 8 in 5 Court, Tower Street	5	Mar. 27th, 1903.
38 Adams Street	1	Mar. 27th, 1903.
5, 8 and 9 Richmond Terrace, Ashley Street	3	Mar. 27th, 1903.
2 in 12 Court, Adams Street	1	Mar. 27th, 1903.
1, 4, 5 and 6 in 37 Court, Brearley Street	6	May 22nd, 1903.
29 Spooner Street	1	July 31st, 1903.
7 Scott Street	1	July 31st, 1903.
1, 2, 3, 4, last house on right, 5 and 7 in Stanton's Buildings, Lower Loveday Street	7	July 31st, 1903.
1, 2, 3, 4, 7 and 8 in 1 Court, Richard Street	6	July 31st, 1903.
3 in 17 Court, Francis Street ...	1	July 31st, 1903.
1, 4, 5 and 6 in 22 Court, Hospital St.	4	Oct. 9th, 1903.
40 to 44 Lister Street	5	Nov. 6th, 1903.
1, 2 and 5 in 3 Court, Manchester St.	3	Nov. 6th, 1903.
1 and 2 back of 214, 215 Bradford St.	2	Dec. 4th, 1903.
1 to 6 in 1 Court, Newdegate Street...	6	Dec. 4th, 1903.
	65	

Houses demolished.

Fifty-one Notices of Demolition were served with regard to the following properties:—

	No. of houses.	Date.
6 Court, Cheapside	3	Dec. 22nd, 1903.
Back of 84 Adams Street	1	Mar. 13th, 1903.
6 Court, Blews Street	2	May 15th, 1903.
Back of 100 Digbeth	14	July 3rd, 1903.
331 Bradford Street	1	July 3rd, 1903.
2 back of 323 Cheapside	1	July 3rd, 1903.
21 Court, Milk Street	7	July 3rd, 1903.
24 Adams Street	1	Dec. 3rd, 1903.
28, 30, 32 and 36 Adams Street ...	4	Dec. 3rd, 1903.
54 and 56 Adams Street	2	Dec. 3rd, 1903.
38 Adams Street	1	Dec. 22nd, 1903.
5 Court, Tower Street	5	Dec. 22nd, 1903.
12 Court, Adams Street	1	Dec. 22nd, 1903.
37 Court, Brearley Street	6	Dec. 22nd, 1903.
Back of 40 Adams Street	2	Dec. 4th, 1903.
	51	

The following 34 houses were demolished during the year 1903 under the Housing of the Working Classes Act :

	No. of houses.	Date.
No. 6 and 2 at back in Richard Street	2	Feb. 18th, 1903.
Sheepcote Street	1	Feb. 13th, 1903.
Back of 31 Slaney Street	1	Feb. 18th, 1903.
9 Court, Digbeth	1	Mar. 4th, 1903.
139, 140 and 141 New John Street ...	3	Mar. 4th, 1903.
4 Court, Bartholomew Street	1	April 29th, 1903.
Back of 18 Lawford Street	1	April 29th, 1903.
Back of 16 Lawford Street	6	April 29th, 1903.
Back of 5 Bull Ring	5	April 29th, 1903.
Back of 44 Adams Street	1	May 20th, 1903.
3 and 4 Courts, Oxford Street... ...	2	June 1st, 1903.
14 Court, Great Barr Street	1	June 29th, 1903.
6 Court. Blews Street	2	July 29th, 1903.
Back of 84 Adams Street	1	July 29th, 1903.
5 Court, Blews Street	1	Oct. 21st, 1903.
6 Court, Water Street	2	Nov. 18th, 1903.
6 Court, Dartmouth Street	1	Nov. 18th, 1903.
Back of 93 Adams Street	1	July 29th, 1903.
2 Essington Street	1	May 20th, 1903.
	34	

It is impossible in a report to indicate the amount of detail in dealing with every individual house under the housing of the Working Classes Act. Each case has to be gone into separately, and dealt with according to its special circumstances. It is, for instance, necessary to invite property owners to confer with the authorities, in order to avoid useless expenditure of money, and this often leads to protracted negotiations. These conferences are nearly always rendered tedious and troublesome on account of the number of interests which have to be consulted in each case.

The results obtained by firm but friendly pressure, rather than by the harsh and arbitrary exercise of the powers conferred on the Corporation by the Act have been most satisfactory. Better work has been done and therefore there has been less liability to subsequent demands for repairs. The evidence is overwhelming that it is in the best interests of both owners and tenants that good work alone should be permitted. The property owners of experience now recognize this fully.

REGISTERED COMMON LODGING HOUSES.

Common Lodging houses.

There were 71 common lodging houses on the register for 1903. In several instances adjoining houses which have been converted into one lodging house are still numbered separately. For this reason, the number on the register represents actually only 52 common lodging houses.

The houses have bed accommodation for 2,522 persons On the night of February 23rd, 1904, only 1,825 of these beds were occupied. In summer time a less number is

Common Lodging houses—(*continued*).

occupied. In four houses there are beds for 241, 208, 202, and 161 persons respectively. Five lodging houses accommodate from 50 to 100 persons each. In 17 the number of beds varies from 30 to 50; while in the remaining 26 it ranges from 8 to 30.

Three small lodging houses provide accommodation for females only. Six houses cater for married couples; while 43 lodging houses only take in males. In two instances during 1903 common lodging houses were closed—one of these was demolished to make way for other buildings. These two houses had accommodation for 22 persons. One house was registered during the year.

For a considerable part of the year an inspector has visited each common lodging house every morning, including Sundays, for the purpose of obtaining early information in regard to lodgers suspected to be suffering from small-pox. Four inspectors have been employed on this duty. In this way 28 cases of small-pox were ascertained. Except in two instances, this inspection was so efficient that the earliest possible information of the disease was obtained. In none of the lodging house cases had a medical man been called in prior to the inspector's visit. To this efficient inspection is largely due the small number of cases of small-pox in lodging houses during the year. No less than 14,895 visits have been paid by inspectors to common lodging houses and houses let in lodgings during the day, while 1,141 visits have been made at night.

There are a few of the Birmingham lodging houses which are admirably adapted for their purpose. On the other hand, several are obviously unsuitable by reason of their general arrangement or structural condition. The powers secured in the Birmingham Corporation Act, 1903, in regard to common lodging houses, will be ample to enable the Corporation to insist that those houses which are by their arrangement and structural condition unfit shall be brought up to a reasonably good condition.

The bye-laws relating to common lodging houses have been strictly enforced during the year. Indeed, there has been evident willingness to conduct the houses so as not to infringe the bye-laws, which in some respects are irksome, though necessary. It was not necessary to take proceedings against the keepers of any of the registered common lodging houses during 1903.

Two persons were summoned during the year for keeping unregistered common lodging houses, and fines of 20s. and 40s. were imposed.

New powers relating to common lodging houses.

The Birmingham Corporation Act, 1903, provides, as regards common lodging houses:—

(1) That the keeper or his appointed deputy shall reside at the lodging house.

(2) That sufficient and suitable sanitary conveniences shall be provided.

(3) That every common lodging house shall be registered for one year from December 31st in each year, and that such annual registration may be refused.

HOUSES LET IN LODGINGS.

Houses let in lodgings.

There exists a good deal of misapprehension as to what class of houses comes within the meaning of the term "houses let in lodgings." They differ entirely from "common lodging houses," and are governed by separate "regulations" (not bye-laws). In Birmingham the term applies to a class of houses not quite the same as in other towns.

Locally, they are termed "lodging houses," and the regulations in regard to them are carried out by the same two inspectors who deal with common lodging houses. The City Council may cause the regulations to apply to any house or part of a house let in lodgings, or occupied by members of more than one family, without limitation as to rental or rateable value. Only such houses, however, are placed on the register as are occupied by persons who actually need such supervision. No difficulty has been experienced in selecting houses which require registration, for there is an increasingly large number of the most thriftless and dirty people who are driven by poverty to inhabit these sub-let houses. In the majority of cases the keeper sub-lets to them one or two rooms, furnished, for a weekly or nightly payment. Everything is provided by the keeper—saucepans, kettle, crockery, spoons, blankets, etc. When the tenant leaves he has nothing to take with him but his clothes. In the case of new tenants the rent is paid daily or weekly, in advance, so that, except in regard to breakages, the keeper runs little or no risk of loss. If the rent is not paid the tenant is usually not admitted, as credit is not given. No irksome and expensive process of ejectment is necessary. Except, therefore, in the case of "empties," the loss by bad debts is never a large one. There is a tendency for the number of such houses to increase. The owner gets his rent regularly from the keeper, while the latter is able to live on the income he gets from supervising ten or more of such sub-let houses.

The rental paid by the keepers to the owners of 202 of these houses (unfurnished) was ascertained to be £47 2s. 8d., while the rental paid by the tenants for the same houses (furnished) was £100 4s. 1d. If one allows 30 per cent. for furniture, repairs, and bad debts, one still gets a profit of over 80 per cent. left for the keeper.

But the people who live in such houses, with few exceptions, are irresponsible citizens with nothing whatever to lose. Poverty, generally due to drink, causes the occupants of these houses to live in squalid misery. The necessity for good and efficient supervision is therefore obvious.

Last year there were 250 sub-let houses on the register, as compared with 228 in the previous year. Forty-six houses were added to the register during 1903, and 24 were taken off for various reasons. Two keepers were fined £1 and 8s. costs each for not providing for the separation of the sexes, and four keepers were summoned for permitting overcrowding to exist, the fines inflicted on them amounting to £4 with £1 12s. costs.

CANAL BOATS.

Canal Boats.

In the following table will be found the number of visits made, and a statement of the other work done by the Canal Boat Inspector during each of the last three years :—

	1901	1902	1903
No. of Canal Boats on Register	373	376	378
No. registered during the year	13	25	13
No. of Certificates cancelled	19	22	11
No. of Inspections made	850	919	969
Breaches of Regulations discovered :			
Want of Registration	5	12	7
Certificate not produced	21	15	23
Not properly marked	11	15	19
Cases of overcrowding	9	10	7
Sexes not separated	7	10	9
Want of Cleanliness	2	0	6
Painting required	2	1	1
Water receptacle not provided	17	10	13
Fore Cabin not registered	2	0	0
Not in habitable condition	7	7	5
Wooden Screen required	0	1	0
Fly Boat used as ordinary boat	0	1	1
	83	82	91

Notices were issued with respect to the above, and were complied with without recourse to legal proceedings.

In addition to devoting his time to the inspection of the canal boats, the inspector is required to see that the children on them attend school.

MILK SUPPLY.

There are at present three separate agencies at work in Birmingham controlling the milk supply in its different departments.

Inspection of cows and Cowsheds.

(1) The Veterinary Inspector periodically visits the cowsheds and examines the cows, in the case of cow-keepers within the City boundary. So far as it goes, this is the most important means of obtaining a pure milk supply.

Only a very small proportion, however, of the milk required for the city is produced in these city cow-sheds. There are no means of supervising the arrangements at the large number of cowsheds outside the city which supply Birmingham. It is certain that in a considerable proportion of cases the cowsheds in rural districts outside Birmingham from which we derive our milk supply are not kept in good condition, owing to the fact that the powers already in existence are not enforced by the Sanitary Authorities. It is very important that effective and uniform action should be taken in this matter. At present, the cow-keepers who are carrying on business in places where the law is properly enforced do so at a disadvantage. But by far the most important matter is that in these rural districts milk is produced under filthy conditions in a good many instances and sent into the city. In summer time, such milk is probably one of the means of setting up epidemic diarrhœa among young children.

It has been suggested that the duty of seeing that proper regulations are enforced should be taken away from the Local Sanitary Authority and placed in the hands of the County Council. Probably this is the best suggestion that has yet been made to meet the difficulty. but it will not by any means fully satisfy all our requirements.

Appended is the report of the Veterinary Inspector on his work during 1903 in connection with cows and cowsheds:—

> " I herewith present the following report on the Inspection of Cows and Cowsheds in the City of Birmingham for the year ended 31st December, 1903.
>
> " *Register.*—On the 31st December, 1903, there were 24 licensed cow-keepers in the city, and in their names 59 cowsheds were registered to contain 602 cows. This is a slight reduction as compared with the previous year, when there were 60 registered sheds with standings for 613 cows. During the year 6 sheds have been removed from the list, 6 have changed hands and have been registered in new names, and

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Inspection of cows and Cowsheds (continued).

5 new sheds have been added. Applications have also been received for the registration of 6 other sheds; of these, 2 have been refused, and 4 deferred until some necessary alterations have been made and certain conditions required under the bye-laws complied with.

"*Visits of Inspection.*—During the year the veterinary inspectors have made 715 visits to cows and cowsheds, each shed visited being reckoned one visit.

"*Cows.*—Following the method adopted in former years, the visits of inspection have been so arranged that the cows in each shed, as a rule, have been inspected once a month. At these visits the udders of all the cows were carefully examined. As a result of this, 68 cows were placed under special examination; of these, 22 were passed, their milk being found normal; 43 were found to be affected with mastitis, or inflammation of the udder, in one or more quarters of the gland, in varying degrees of intensity; one had cow-pox; one was giving milk mixed with blood; and one had tuberculosis of the udder. Compared with this, in 1902 there were 42 cases of catarrhal or suppurative mastitis, but no case of tuberculosis of the udder or other disease. The milk of the cows affected with mastitis, being contaminated with pus and other inflammatory products, was prohibited from sale. A few of the cows recovered after a short time, and their milk secretion resumed its normal character, but the majority lost permanently the secreting function of the invaded quarters. The clinical evidence offered by these cases confirms the opinion formerly expressed that mastitis is in many cases a communicable disease, conveyable from cow to cow by the hands of the milker. In every case the dairymen have been warned to take precautions to prevent the transmission of the disease to healthy cows, and have been advised to isolate the affected animals, or, failing the accommodation for that, to place them at the end of the shed and milk them last. On explaining the dangerous nature of the case to the owner of the cow affected with tuberculosis of the udder, he willingly fell in with our wishes, and had the cow removed from the premises and killed. With respect to the case of cow-pox, precautions were taken against the spread of the disease, and fortunately no other case occurred. In the case of the cow giving milk mixed with blood, the cause was probably due to an injury; the milk soon became normal, and its sale was therefore only temporarily stopped.

> "*Cowsheds.*—The cowsheds as a whole have been kept in good sanitary condition, and the lime-washing and cleansing provided for in the bye-laws have been duly carried out. The substitution of surface drains in place of the underground drains formerly in existence in some of the sheds has now been effected. In some of the sheds it has been necessary to request various structural repairs, such as the re-laying of floors and gutters, the repairing of defective roofs, and the repairing and renewing of stall divisions. In all cases these requests have been complied with."

Inspection of milkshops and dairies.

(2) In addition to the inspection of cows and cowsheds in Birmingham, one inspector devotes the whole of his time to inspecting the conditions under which milk is stored for sale in the milkshops of the city. A large amount of milk is sold by small shops where a miscellaneous business is carried on. These shops store a few gallons of milk on a counter, or shelf, or on the "cellar-head," and retail it in small quantities. Milk in such shops is often kept under bad conditions, as it is liable to be contaminated with dust and dirt of all kinds. With a view to seeing what can be done to minimise the contamination which takes place, Dr. McCrindle is at present making an inspection of every shop in the city with a view to drafting some general directions in regard to the conduct of them.

The Milkshop Inspector has supplied the following information in regard to his work during the year:—

	1902	1903
Dairies on the register	24	26
Milkshops on the register	3062	2734
Purveyors on the register	130	163
Dairies registered during the year ...	5	5
Milkshops registered	642	347
Purveyors registered	25	44
Dairy certificates cancelled	5	3
Milkshops ,, ...	277	675
Purveyors ,, ...	5	11
Visits to dairies	150	105
Visits to milk shops and milk stores ...	5555	5021
Dirty vessels found at milk shops and milk stores	7	36
Shops, cellars, and pantries whitewashed	28	59
Dirty churns found at railway stations ...	6	7
Cases of infectious disease reported at milkshops	57	40

Analysis of milk.

(3) Another means of securing a good milk supply is the work done under the Sale of Food and Drugs Acts in the taking of samples from milk vendors. The City Analyst, in his report for 1903, states that the number of samples submitted for analysis during the year was 534, that is, about one for every thousand of the population.

Precautions against impure milk.

There are several other means which can be taken to secure a pure milk supply. In 1903 powers were obtained to enable the Corporation to deal with cases of tuberculosis of the udder in cows whose milk is sent to Birmingham. Preliminary steps are being taken to put these powers in operation. There is some delay, however, owing to the necessary laboratory accommodation not being available at the University.

Even more important, however, than the examination of samples of milk for tubercle bacilli will be the properly-directed work of estimating the bacterial content of milks with a view to suggesting the methods for preventing foul milk being sold. At the present time a large quantity of milk from the country districts is not produced under cleanly conditions—cow dung and other filth having access to the milk. No proper cooling apparatus is available, with the result that the warm milk helps the multiplication of micro-organisms, and, after sending milk by train and by cart and allowing for all delays, it is often found that twenty-four hours have elapsed, and that the number of germs in the milk has multiplied to such an extent that it is a risky article of diet instead of being a safe one. It is to be hoped that some arrangement will be come to with a view to having a systematic examination of our milk supplies.

MEAT, FISH, AND FRUIT SUPPLY.

Bad meat, fish and fruit.

The inspection of slaughter-houses and of shops where food is stored or sold is carried out by inspectors appointed by the Markets and Fairs Committee. The Superintendent of the Markets, who directs their operations, has supplied the following statement showing the amount of meat, fish, and fruit condemned during the year:—

BAD MEAT.

Voluntarily surrendered	2684 lots.
Seized by Inspectors	18 lots.
Weight destroyed	223 tons.
Persons prosecuted	6.
Penalties inflicted	£75

BAD FISH.

Voluntarily surrendered	713 lots.
Seized	8 lots.
Weight destroyed	93 tons.
Persons prosecuted	2.
Penalties inflicted	£15

BAD FRUIT.

Weight destroyed	17 tons.
Persons prosecuted	1.
Penalties inflicted	£20

The same inspectors paid 10,102 visits to slaughter-houses, and, generally, found them to be in a clean condition.

Slaughter-houses.

Several of the private slaughter-houses that have been inspected by the Medical Officer of Health during the year were found to be most unsuitable as regards situation; and, from the point of view of control of the meat supply, these slaughter-houses should be abolished at the earliest possible opportunity.

WATER SUPPLY.

Water supply.

In Table XI. will be found a record of the results of the analyses of drinking water made for the Health Committee during the year. It is anticipated that the Welsh water supply will be turned on at an early date, when the present unsatisfactory hard water will, it is hoped, be discontinued.

FACTORY AND WORKSHOPS ACT, 1901.

Workshops and bakehouses.

In 1903 there were no less than 7,121 workshops and 639 bakehouses on the register. In addition, however, to the above, there are numbers of work-places, roughly estimated at over 2,500, which require to be occasionally visited. Many of these work-places are among the most important to which the attention of the Workshops Inspectors can be directed, as they include the large number of hotel and restaurant kitchens, and other similar places, where food is prepared, cooked, or stored.

In addition to the important work of visiting these workshops, the duty is cast on the inspectors (1) of regularly inspecting bakehouses; (2) of seeing to the sufficiency and suitability of the conveniences provided in factories; (3) of visiting the out-workers employed by various firms; (4) of making the necessary inspections of shops to see that the provisions of the Shop Hours Acts and of the Seats for Shop Assistants Act are complied with. Quite recently it has been decided to increase the staff dealing with this work by the appointment of a third inspector (a woman inspector), whose duty it will be to deal with the workshops where women are employed, and with certain other places which require inspection.

With this large number of workshops it may be found necessary to obtain assistance from the district inspectors at certain times. Every workshop and work-place should be visited at least once in every six months. Frequently one visit will necessitate several re-visits to ascertain that insanitary conditions found have been remedied.

Workshops.

Workshops.—The 7,121 workshops on the register during 1903 were distributed among the following trades:—

Dressmakers	679
Tailors	892
Milliners	93
Laundries	132
Shoemakers, repairers, etc.	331
Sugar boilers, etc.	38
Iron and tin plate workers	359
Jewellers, etc.	519
Carpenters, etc.	519
Wood Carvers	18
Saddle and leather trades	242
Cycle work, tyres, etc.	324
Carriage builders, etc.	134
Lamp makers	128
Art metal workers	59
Brassfounders	187
Wireworkers	81
Japanners	48
File cutters, etc.	16
Upholsterers	44
Watch and clock makers and repairers	42
Whip makers, etc.	51
Basket makers	38
Opticians	42
Glass blowers	22
French polishers	47
Electro-platers	43
Engravers	86
Enamellers	48
Locksmiths	15
Scale makers	26
Sword makers	11
Cutlers	6
Druggists' sundries	12
Printers and bookbinders	44
Maltsters	5
Gas stove makers	3
Mattress makers	27
Brushmakers	138
Metal button makers	11
Pearl and ivory workers (buttons, etc.)	111
Gunsmiths	93
Silversmiths	42
Engineers, steel toy makers, etc.	123
Diesinkers, letter cutters, etc.	149
Shoeing smiths and blacksmiths	101
Stud, pipe mounts, ferrule makers, etc.	81
Cardboard box makers	119
Paper bag makers	16
Paper manufacturers	6
Nets, rope, etc.	15
Stampers and piercers	85
Pressworkers	17
Lacquerers and burnishers	14
Cigarette makers	10
Rag sorters, etc.	19
Builders	37
Plumbers, solderers, etc.	46
Curriers	13
Furriers	3
Bottlers	27
Surgical and geometrical instrument makers	7
Shipping tackle makers	7
Stationers' sundries	13
Clock dial makers	13
Sign writers, etc.	55
Motor car builders	3
Safe makers	4
Measuring tape makers	8
Musical instrument makers	10
Fire iron makers	29
Galvanizers	5
Repoussé workers	10
Umbrella makers	5
Miscellaneous trades	241

Bakehouses

Bakehouses.—The 639 bakehouses include 41 underground bakehouses. Of the 41 underground bakehouses, 22 were voluntarily closed as being obviously unsuitable. The remaining 19 were visited and reported on to the Health Committee, under Section 101 of the Factory and Workshops Act, 1901. Certificates of fitness were granted in the case of 14—in most instances after considerable alterations had been carried out—in four cases such certificates were refused; and in the remaining case negotiations between the Health Committee and the owners were still in progress at the time of writing this report.

It may be noted as a satisfactory feature in the bread supply of Birmingham that so few underground bakehouses exist. It is even more satisfactory from the point of view of those employed in underground bakehouses. It is certain that employment in any form in underground workshops is not conducive to health. Indeed, it is to be hoped that, sooner or later, the length of employment in such underground places will be limited by the legislature, unless certain conditions as to lighting and ventilation are complied with.

One thousand four hundred and eighty visits were paid to bakehouses during 1903. It will be advisable to nearly double this number of visits in the future.

Outworkers.

Outworkers.—243 firms sent in lists of outworkers, containing the names of 1,707 persons. They were as follows:—

Trade.	Number of persons sending in lists.	Number of persons employed as outworkers.
Tailors	221	1,565
Dressmakers	1	13
Underclothing, etc.	6	42
Furriers	1	1
Boot Manufacturers	5	36
Cabinet Makers	3	4
Electro-platers	4	38
File Cutters	2	8
Total	243	1,707

Nine persons were summoned for contraventions of the Factory and Workshops Act in regard to outworkers, as follows:—

Four for failing to keep prescribed list of outworkers—

1 fined 5s. and costs.
1 fined 10s. and costs.
2 paid costs only.

Five for failing to forward list of outworkers—

3 fined 20s. and costs.
2 fined 10s. and costs.

Total fines, £4 15s. Costs, £3 6s.

The accompanying table gives certain comparative figures relating to the work done in regard to the sanitary condition of workshops:—

	1899	1900	1901	1902	1903
No. of workshops visited ...	10,704	12,064	10,637	11,684	9.642
,, ,, limewashed ...	1,317	1,795	1,382	1,327	756
,, ,, repaired ...	94	252	196	156	85
,, ,, reported dangerous	19	41	36	16	2
,, ,, ventilated ...	110	150	177	164	111
,, ,, disinfected after infectious diseases	—	4	3	14	38
,, ,, discontinued to be used as dwellings	—	15	12	10	1
,, cases of overcrowding in workshops remedied ...	24	50	24	30	21
,, water closets provided ...	268	337	219	175	94
,, ,, repaired ...	86	345	334	217	125
,, ashpits filled up, water closets being provided..	20	24	18	9	11
,, pan privies removed, water closets being provided	35	50	51	50	53
,, urinals provided	28	58	39	33	24
,, drains repaired or trapped	54	169	128	117	107
,, drains removed	6	9	10	10	1
,, yards paved or repaired ..	10	60	59	47	25
,, accumulations removed ...	20	62	48	30	27
,, animals removed from workshops	18	24	13	—	—
,, visits to outworkers	—	—	—	No record kept	1,207
Persons summoned	—	-	—	4	9
Amount of penalties	—	—	—	£2/10/-	£4/15/-
,, costs	—	—	-	£1/12/-	£3/6/-
Visits to bakehouses	1,033	1,033	1,154	1,303	1,480
Bakehouses limewashed... ...	71	112	190	165	173
Persons summoned	1	—	—	—	—

SHOP HOURS ACTS.

Shop Hours Acts.

The two chief provisions of these short Acts are (1) that no person under the age of 18 years shall be employed in or about a shop for more than 74 hours (including meal hours) in any week: (2) that in every shop where a person under 18 years of age is employed a notice shall be exhibited in a conspicuous place setting out the provisions of the Act. This means that it has been quite legal to employ children for 12 hours a day (with 14 hours on Saturday). Such long hours in shops were infrequently worked, but undoubtedly the setting of a standard so lax caused many employers to lengthen the hours of employment for their young persons. An attempt is being made to get the legislature to reduce the number of hours per week during which a child may be employed.

During 1903, 1,704 shops were visited, as compared with 1,456 in 1902. In eight instances contraventions were found, and summonses in each case were issued, with a result that fines amounting to £3 10s. were imposed, with £5 8s. costs.

SEATS FOR SHOP ASSISTANTS ACT, 1899.

Seats for Shop Assistants Act.

This Act provides that in all shops where female assistants are employed in retailing goods to the public seats shall be provided behind the counter, or in some other suitable position, in the proportion of not less than one seat for every three female assistants employed in each room.

During 1903, 1,686 shops were visited, and in two instances the owners were summoned for contraventions of the Act. Fines amounting to £1, with 12s. costs, were imposed.

BLACK SMOKE NUISANCES.

Smoke.

The four smoke inspectors made 16,705 observations, each of an hour's duration, during 1903. This number includes observations not only on chimneys connected with steam boilers, but also on those connected with metallurgical furnaces of various kinds, brewing coppers, etc. The average duration of black smoke per hour was 1·27 minutes. In the previous five years the number of observations and average number of minutes of smoke were as follows:—

	1898	1899	1900	1901	1902	1903
No. of Observations ...	6431	14100	9358	15808	13445	16705
Average number of minutes of black smoke per observation	3·42	1·36	1·95	1·34	1·26	1·27

Taking the observations for 1903 in detail, it was found that—

14,620 observations showed less than 2 minutes per hour.
68 observations showed 2 minutes per hour.
183 ,, ,, 3 ,, ,,
126 ,, ,, 4 ,, ,,
148 ,, ,, 5 ,, ,,
172 ,, ,, 6 ,, ,,
173 ,, ,, 7 ,, ,,
142 ,, ,, 8 ,, ,,
110 ,, ,, 9 ,, ,,
132 ,, ,, 10 ,, ,,
138 ,, ,, 11 ,, ,,
89 ,, ,, 12 ,, ,,
94 ,, ,, 13 ,, ,,
79 ,, ,, 14 ,, ,,
56 ,, ,, 15 ,, ,,
64 ,, ,, 16 ,, ,,
67 ,, ,, 17 ,, ,,
41 ,, ,, 18 ,, ,,
27 ,, ,, 19 ,, ,,
18 ,, ,, 20 ,, ,,
13 ,, ,, 21 ,, ,,
24 ,, ,, 22 ,, ,,
17 ,, ,, 23 ,, ,,
20 ,, ,, 24 ,, ,,
15 ,, ,, 25 ,, ,,
15 ,, ,, 26 ,, ,,
10 ,, ,, 27 ,, ,,
6 ,, ,, 28 ,, ,,
7 ,, ,, 29 ,, ,,
7 ,, ,, 30 ,, ,,
1 ,, ,, 31 ,, ,,
2 ,, ,, 32 ,, ,,
1 ,, ,, 33 ,, ,,
4 ,, ,, 34 ,, ,,
5 ,, ,, 35 ,, ,,
1 ,, ,, 36 ,, ,,
3 ,, ,, 40 ,, ,,
1 ,, ,, 41 ,, ,,
2 ,, ,, 43 ,, ,,
1 ,, ,, 44 ,, ,,
1 ,, ,, 45 ,, ,,
2 ,, ,, 48 ,, ,,

For practical purposese it has been found necessary in most towns to fix a limit to the amount of smoke emitted from chimneys, beyond which black smoke shall be considered excessive and preventible. In Birmingham the limit has been fixed so as to apply equally to the chimneys connected with all types of furnaces. That 90 per cent. of all the observations were of two minutes' duration, or under, indicates that the present limit is too lax.

Prevention of black smoke.

Experience everywhere has shown that for chimneys connected with boiler furnaces it is practically possible to do away with black smoke, provided the following conditions exist:

(A) Sufficient boiler accommodation, with properly fixed boilers.

Prevention of black smoke (continued).

(B) Careful hand firing.

(c) Proper fuel.

There are a few other conditions which influence the amount of black smoke, such as when the fires are being lighted, and in cases where the " load " on the boilers is a very varying one, but these are unimportant compared with the above.

The conditions which apply to the prevention of black smoke from metallurgical furnaces are different from those in the case of boiler furnaces. That the amount of smoke from these is often very excessive is undoubted. Extended observations on such chimneys indicate that by careful attention to the firing, to the quality of the fuel, and to the construction of the furnace, it is possible to reduce the amount of smoke from these furnaces without in any way endangering the metal or retarding the process.

While our Birmingham limit is a particularly easy one for all metallurgical furnaces, it obviously allows of too much smoke from boiler furnaces, brewing coppers, etc. There is a necessity for making two limits, one for boiler chimneys and the other for chimneys from metallurgical furnaces.

During 1903, 151 cases of excessive emissions of black smoke were dealt with by the Health Committee. In 71 of these letters of caution were sent, while in 80 cases proceedings were taken. In 75 instances a fine was imposed, while in four the cases were withdrawn or dismissed on payment of costs, and in one the case was dismissed.

The average amount of penalty per case, exclusive of costs, was 13s. 2d. It varied from 2s. 6d. to £4.

Comparing these results with those of former years, we get the following statement:—

	1898	1899	1900	1901	1902	1903
Total cases dealt with	152	117	125	116	139	151
Cautionary letters sent	99	81	89	80	89	71
Police Court proceedings ...	53	35	35	35	50	80
Total amount of fines	£40/2/0	£19/10/0	£24/10/0	£15/2/6	£33/15/0	£49/7/6
Total amount of costs	£21/10/0	£14/0/0	£14/6/0	£14/4/0	£19/8/6	£36/15/6
Average fine ...	15/1	11/2	14/0	8/7	13/6	13/2

GENERAL SANITARY WORK.

Nuisances abated.

It is always difficult to give any satisfactory tabular statement which will readily indicate the nature and extent of the work done in abating nuisances. The table on page - shows as far as possible what has been done during the last three years. It will be noted, for instance, that the number of ashpit privies converted into water-closets is still considerable, while the number of pan-privies converted has increased from 486 to 2,395. A large amount of the time of the district inspectors is taken up in examining and testing drains, in making enquiries in regard to infectious cases, and in other similar work.

Court cleansing.

The separate staff of court cleansers is doing most excellent work. It is, however, somewhat doubtful as to whether a large part of it should not be required to be done by the tenant.

HEALTH VISITORS' WORK.

Women Health Visitors.

The thirteen health visitors have continued their work during the year without interruption. The total number of primary visits made was not quite as large as in 1902, but this was due to their services being required in other directions. On all hands good reports are made of the work of these officers.

APPENDIX.

[illegible]

TABLE I.—VITAL STATISTICS OF WHOLE DISTRICT DURING 1903 AND PREVIOUS YEARS.

Year.	Population estimated to middle of each year.	Births.		Deaths Under 1 Year of Age.		Total Deaths Registered At all Ages.		Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in the District.	Deaths of Residents registered beyond the District.	Nett Deaths at all Ages belonging to the District.	
		Number.	Rate.*	Number.	Rate per 1,000 Births registered.	Number.	Rate.*				Number.	Rate.*
1	2	3	4	5	6	7	8		10	11	12	13
1893.	487,897	15,881	32·6	3,146	198	10,445	21·5	1,631	—	—	—	—
1894.	492,301	15,505	31·6	2,539	164	8,946	18·2	1,549	—	—	—	—
1895.	496,751	16,014	32·3	2,910	182	9,863	19·9	1,656	—	—	—	—
1896.	501,241	†16,582	32·5	†3,265	197	†10,405	20·4	†1,554	—	—	—	—
1897.	505,772	16,771	33·2	3,594	214	10,668	21·1	1,489	—	—	—	—
1898.	510,343	17,289	34·0	3,287	190	9,936	19·5	1,518	—	—	—	—
1899.	514,956	17,609	34·3	3,398	193	10,446	20·3	1,614	247	325	10,524	20·5
1900.	519,610	16,941	32·7	3,366	199	10,756	20·8	1,911	267	393	10,882	21·0
1901.	523,284	16,735	32·1	3,150	188	10,357	19·8	1,802	302	347	10,402	19·9
1902.	528,181	†17,103	31·9	†2,681	157	†9,577	17·8	†2,082	†312	†407	†9,672	18·0
Averages for years 1893-1902	508,034	16,643	32·7	3,134	188	10,140	19·9	1,680	—	—	—	—
1903.	533,039	16,866	31·7	2,668	158	9,056	17·0	1,916	321	388	9,123	17·2

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population. † 53 weeks.

Area of District in acres, 12,639.

Total population at all ages at Census of 1901 522,204.
Number of inhabited houses ,, ,, 107,831.
Average number of persons per house at Census of 1901, 4·8.

TABLE II.—VITAL STATISTICS OF SEPARATE LOCALITIES IN 1903 AND PREVIOUS YEARS.

Year.	Population estimated to the middle of each year.	Deaths at all ages.	Death-rate per 1,000.	Population estimated to the middle of each year.	Deaths at all ages.	Death-rate per 1,000.	Population estimated to the middle of each year.	Deaths at all ages.	Death-rate per 1,000.	Population estimated to the middle of each year.	Deaths at all ages.	Death-rate per 1,000.	Population estimated to the middle of each year.	Deaths at all ages.	Death-rate per 1,000.	Population estimated to the middle of each year.	Deaths at all ages.	Death-rate per 1,000.
Wards	ROTTON PARK.			ALL SAINTS'.			LADYWOOD.			ST. PAUL'S.			ST. GEORGE'S.			ST. STEPHEN'S.		
1899	41,673	758	18·2	40,009	705	17·6	25,140	496	19·8	17,118	376	22·0	20,641	490	23·8	23,533	624	26·6
1900	43,339	773	17·8	42,251	828	19 6	25,177	484	19·2	17,025	346	20·4	20,473	539	26·3	23,385	615	26·3
1901	46,835	752	16·1	41,444	725	17·5	25,089	502	20·0	14,954	338	22·6	20,230	469	23·2	23,765	633	26·6
1902	46,088	677	14·4	41,834	659	15·5	25,128	444	17·3	15,552	289	18·2	20,434	449	21·6	23,720	640	26·5
1903	46,987	650	13·9	42,101	662	15·7	25,253	448	17·8	15,561	299	19·2	20,412	425	20·8	23,768	499	21·0
Wards	ST. MARY'S.			ST. BARTHOLOMEW'S.			MARKET HALL.			ST. THOMAS'.			ST. MARTIN'S.			EDGBASTON AND HARBORNE.		
1899	15,536	476	30·7	26,947	732	27·2	11,030	207	18·8	18,682	428	22·9	23,941	503	21·0	30,313	418	13·8
1900	15,570	475	30·4	27,003	749	27·7	10,858	234	21·5	19,057	399	20·9	24,143	527	21·9	30,718	441	14·4
1901	15,904	472	29·7	26,857	696	25·9	9,807	171	17·4	19,215	402	20·9	23,950	485	20·3	30,795	402	13·1
1902	15,993	405	24·8	26,876	678	24·6	9,570	165	16·9	18,586	381	20·1	24,097	499	20·3	31,200	390	12·3
1903	16,248	375	23·1	26,572	647	24·4	9,483	154	16·3	18,559	347	18·7	24,019	404	16·8	31,311	380	12·1
Wards	DERITEND.			BORDESLEY.			DUDDESTON.			NECHELLS.			BALSALL HEATH.			SALTLEY.		
1899	25,346	618	24·4	52,206	807	15·5	24,038	512	21·3	33,773	761	22·5	38,120	666	17·5	36,717	672	18·3
1900	24,771	645	26·0	53,770	851	15·8	24,274	569	23·4	33,701	739	21·9	38,579	619	16·0	40,829	681	16·7
1901	21,704	550	22·3	54,686	843	15·4	23,921	555	23·2	33,624	760	22·6	38,827	582	15 0	42,250	741	17·6
1902	24,516	507	20·3	55,606	761	13·4	23,773	517	21·3	33,384	636	18·7	39,025	589	14·8	44,185	679	15·1
1903	24,077	517	21·5	56,825	758	13·3	23,541	463	19·7	33,710	570	16·9	39,359	531	13·5	45,427	714	157

NOTE.—The inmates of large Institutions are not included in the Ward populations, and the deaths amongst them have been referred, as far as possible, to the Wards in which the deceased persons had previously resided.

TABLE III.

Cases of Infectious Disease Notified during the Year 1903.

NOTIFIABLE DISEASE.	At all Ages.	CASES NOTIFIED IN WHOLE DISTRICT.								TOTAL CASES NOTIFIED IN EACH WARD.																		
		At ages—Years.								1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
		Under 1.	1 to 5.	5 to 10.	10 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and up.	Rotton Park.	All Saints'.	Ladywood.	St. Paul's.	St. George's.	St. Stephen's.	St. Mary's.	St. Bartholomew's	Market Hall.	St. Thomas'.	St. Martin's.	Edgbaston and Harborne.	Deritend.	Bordesley.	Duddeston.	Nechells.	Balsall Heath.	Saltley.	Institutions.
Smallpox	251	7	4	13	15	81	94	34	3	5	4	2	1	10	6	9	61	...	4	7	7	11	9	19	26	38	25	7
Scarlet Fever ...	2835	36	893	1134	413	245	110	4	...	303	214	122	51	97	93	44	117	46	91	98	89	118	402	102	179	269	347	53
Diphtheria ...	818	20	256	237	101	114	76	14	...	93	65	57	26	34	26	6	60	8	35	29	16	45	91	33	34	41	114	5
Membranous Croup	66	5	43	14	3	1	...	..	...	5	3	1	1	7	9	3	4	..	1	1	...	3	1	...	6	3	18	...
Typhus Fever ..	...	...	...	...	...	...	...	...	...		...	..	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...
Enteric Fever ..	348	...	22	36	47	95	133	14	1	22	20	11	11	9	14	14	21	3	10	11	18	29	37	27	33	20	30	8
Simple Continued Fever... ...	2	..	1	1	...	...	..	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...
Relapsing Fever ..	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...
Puerperal Fever ..	31	...	...	...	...	8	23	...	...	1	4	1	...	1	2	2	4	...	..	2	2	3	1	2	...	3	3	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...
Erysipelas	644	34	34	27	26	84	191	184	64	67	55	28	18	19	27	15	36	8	22	26	16	19	54	28	42	36	77	51
Chickenpox ..	1684	232	723	581	95	37	15	1	...	167	113	61	56	59	75	58	93	32	56	90	107	41	142	54	130	134	180	36
Totals ..	6679	334	1976	2043	700	665	642	251	68	663	478	283	164	236	252	151	396	98	220	264	255	269	737	265	450	544	794	160

TABLE IV.

Deaths of Persons belonging to Birmingham during the Year ending January 2nd, 1904.

	AGES.								WARDS.																		Not located.	City.
	0—1	1—5	5—10	10—15	15—25	25—45	45—65	65 and up.	Rotton Park.	All Saints'.	Ladywood.	St. Paul's.	St. George's.	St. Stephen's.	St. Mary's.	St. Bartholomew's.	Market Hall.	St. Thomas'.	St. Martin's.	Edgbaston & Harborne.	Deritend.	Bordesley.	Duddeston.	Nechells.	Balsall Heath	Saltley.		
ALL CAUSES	2668	1154	226	97	333	1205	1752	1688	650	662	448	299	425	499	375	647	154	347	404	380	517	758	463	570	531	714	280	9,123
Smallpox	3	..	..	1	1	4	2	1	..	..	..	..	1	..	1	1	..	..	..	1	..	..	2	..	2	4	..	12
Measles	50	133	12	..	..	..	..	..	18	25	8	6	10	15	8	11	1	4	8	3	13	12	10	3	..	39	1	195
Scarlet Fever	4	87	38	8	4	3	..	.	13	15	1	6	6	4	4	9	1	5	2	2	11	15	7	12	13	17	1	144
Typhus Fever	..	..	..	..	..	.	.	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Influenza	5	1	..	..	4	11	21	21	8	3	2	..	..	1	..	5	..	..	2	9	4	6	2	3	7	5	6	63
Whooping Cough	37	51	5	..	..	..	..		7	6	4	..	5	7	6	9	..	5	2	4	6	12	..	3	3	12	2	93
Diphtheria, Membranous Croup	12	78	36	6	1	4	1	..	9	5	7	4	6	5	1	14	1	2	7	..	13	16	6	..	8	31	..	135
Croup	..	3	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2	..	1	..	..	..	4
Enteric Fever	..	1	3	5	18	36	2	1	5	6	6	..	..	2	3	5	..	..	5	3	8	4	9	6	4	..	..	66
Asiatic Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa, Dysentery	237	58	4	..	..	1	5	12	21	29	22	17	19	22	8	30	3	20	10	5	12	28	7	20	4	29	11	317
Epidemic or Zymotic Enteritis	215	53	1	..	..	..	1	1	8	6	5	9	14	50	15	31	3	7	19	2	11	15	23	35	4	13	1	271
Enteritis	84	20	3	..	1	8	7	13	12	20	3	4	10	5	11	9	3	1	1	5	11	5	5	9	12	5	5	136
Other Continued Fevers	4	..	..	1	..	..	..	..	1	..	..	..	..	1	.	..	2	..	..	..	1	..	..	..	..	..	..	5
Zoogenous Diseases	1	1	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	.	..	..	1	..	1	..	3
Venereal Diseases	32	4	..	..	..	7	3	..	5	5	4	..	1	..	2	5	..	3	2	2	2	3	3	4	..	..	5	46
Erysipelas	3	2	..	1	1	..	7	8	3	1	1	..	2	..	1	2	..	..	1	1	1	2	..	3	1	2	1	22
Puerperal Fever	..	..	..	..	5	16	..	..	..	2	..	..	..	1	2	1	..	1	2	1	4	1	4	..	1	1	..	21
Other Septic Diseases	4	3	2	2	1	4	5	1	2	3	1	..	1	2	1	1	1	..	1	4	.	1	1	1	1	1	..	22
Malarial Diseases	..	..	..	..	..	1	..	..	..	.	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
Rheumatic Fever	1	..	2	2	6	9	2	.	..	3	1	2	3	1	..	1	..	..	1	..	..	5	..	1	1	3	..	22
Parasitic Diseases	..	..	..	..	1	..	1	.	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	2
Tuberculosis of Meninges	23	27	5	2	4	2	..	..	4	6	5	1	3	2	1	2	2	4	3	2	6	6	3	7	12	4	..	73
Tuberculosis of Lungs	4	7	7	11	87	377	230	31	55	44	35	26	42	47	47	63	14	32	40	19	41	65	32	46	41	47	18	754
Tuberculosis of Intestines	67	28	7	3	2	4	2	..	9	14	8	8	8	3	2	4	1	2	1	1	8	12	7	8	10	7	..	113
Tuberculosis (other forms)	17	15	6	6	7	18	14	2	7	5	2	6	3	1	10	2	3	6	5	1	2	8	5	4	7	6	2	85
Alcoholism	..	..	..	..	..	13	16	2	2	2	..	3	1	3	..	4	1	..	2	2	3	3	1	..	2	1	1	31
Ptomaine Poisoning	..	..	..	..	..	..	1	..	1	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	1
Lead Poisoning	..	..	..	..	..	1	4	..	..	1	1	..	..	1	..	..	..	..	..	..	..	..	1	..	1	..	.	5
Cancer	..	2	..	1	4	40	214	152	36	28	27	15	19	14	12	23	6	14	14	27	20	32	20	24	42	28	12	413
Other Constitutional Diseases	4	6	4	2	7	17	36	29	7	8	6	5	2	5	4	4	1	2	5	7	4	11	6	9	5	10	4	105
Premature Birth	365	..	..	..	.	..	..	..	47	31	20	10	15	18	6	20	3	10	13	12	24	44	18	15	20	27	12	365
Debility, Marasmus	531	42	..	..	..	..	..	..	41	44	27	10	27	38	29	46	9	17	23	15	34	31	44	47	29	46	16	573
Other Developmental Diseases	164	45	1	..	..	1	..	..	17	19	13	4	6	7	3	10	..	10	9	2	18	31	5	12	18	26	1	211

Deaths of Persons belonging to Birmingham during the Year ending January 2nd, 1904—*continued.*

	AGES.								WARDS.																			
	0—1	1—5	5—10	10—15	15—25	25—45	45—65	65 and up.	Rotton Park.	All Saints'.	Ladywood.	St. Paul's.	St. George's.	St. Stephen's.	St. Mary's.	St. Bartholomew's.	Market Hall.	St. Thomas'.	St. Martin's.	Edgbaston & Harborne.	Deritend.	Bordesley.	Duddeston.	Nechells.	Balsall Heath	Saltley.	Not located.	City.
Old Age	..	..	..	..	..	..	20	372	17	34	19	9	12	14	16	15	10	9	18	34	22	32	20	36	13	29	33	392
Convulsions	119	30	1	..	..	..	..	..	5	10	6	4	4	15	6	11	3	6	4	2	13	8	6	12	6	27	2	150
Meningitis	43	61	10	2	8	15	9	5	7	10	7	9	8	9	4	14	2	5	8	1	5	11	12	24	8	9	..	153
Cerebro-spinal Meningitis	6	6	1	..	..	..	..	..	..	1	1	..	..	2	..	..	..	4	..	1	..	..	3	1	..	..	..	13
Inflammation and Softening of Brain	1	..	2	..	2	2	7	9	..	1	1	1	1	1	1	..	..	1	..	3	1	5	1	..	2	3	1	23
Other Diseases of Nervous System	8	6	2	3	11	67	108	102	25	16	22	6	13	8	13	14	15	17	18	22	13	24	8	15	20	15	23	307
Diseases of Ear, Eye, and Nose	5	4	1	2	2	1	3	..	5	..	..	..	..	..	..	1	1	1	..	1	..	2	..	..	4	2	1	18
Heart Diseases	7	4	13	16	39	119	238	209	48	44	43	17	34	26	18	49	13	20	27	34	30	61	35	36	58	41	11	645
Other Diseases of Circulatory System	..	..	..	..	4	22	104	114	18	14	14	11	8	4	6	8	3	4	18	20	14	22	15	11	22	19	13	244
Bronchitis	222	86	6	1	4	37	229	316	43	69	34	42	52	64	42	78	8	44	38	33	51	62	40	55	39	72	35	901
Pneumonia	190	177	18	4	31	109	144	100	56	52	36	20	33	39	31	69	16	40	35	34	42	61	49	30	43	57	32	773
Pleurisy	1	5	..	..	3	8	5	5	3	1	1	..	2	1	2	2	..	1	3	2	1	3	2	1	..	2	.	27
Other Diseases of Respiratory System	2	12	2	2	2	4	14	12	4	3	2	2	3	2	1	3		2	3	6	1	4	3	5	5	1	..	50
Diseases of Stomach	38	7	3	..	8	15	27	18	7	3	6	4	4	7	13	4	3	4	6	9	7	11	8	9	5	5	1	116
Obstruction of Intestines	11	3	1	1	4	12	16	14	4	5	2	2	1	5	2	2	1	..	4	3	5	11	2	1	3	4	5	62
Cirrhosis of Liver	..	..	..	1	..	29	55	15	9	8	5	5	1	7	5	3	1	9	6	3	10	6	4	5	9	4	..	100
Other Diseases of Digestive System	17	8	9	6	17	21	27	19	12	14	8	4	9	1	2	8	1	5	3	8	4	11	7	11	8	5	3	124
Dis. of Lymph. System & Ductless Glands	2	1	..	..	..	5	3	3	2	..	..	..	2	..	1	1	..	..	..	2	1	1	..	..	2	1	1	14
Nephritis and Bright's Disease	2	3	1	2	10	47	82	32	14	11	11	11	5	7	12	14	5	9	8	13	8	10	4	9	12	9	7	179
Other Diseases of Urinary System	2	1	..	..	2	9	14	26	3	2	1	4	5	3	..	4	1	5	4	3	1	4	3	3	2	3	3	54
Diseases of Male Genital Organs	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	.	..	1
Diseases of Female Genital Organs	1	..	..	..	2	9	4	2	1	3	1	2	..	..	..	..	1	1	1	2	2	1	1	..	..	2	..	18
Accidents and Diseases of Parturition	..	..	..	..	7	36	..	..	2	4	4	..	..	3	1	2	1	2	1	1	2	5	2	3	2	8	..	43
Diseases of Osseous System	1	4	2	1	3	2	2	3	..	1	..	1	3	1	1	..	1	1	1	1	..	3	1	..	2	1	..	18
Diseases of Integumentary System	7	3	..	..	1	..	1	1	2	1	..	..	1	..	2	1	..	2	1	..	..	..	1	..	1	1	..	13
Accidental Suffocation	95	4	1	..	..	.	..	..	5	7	6	2	8	11	4	7	3	4	4	2	14	7	4	6	2	4	..	100
Other Accidents	7	51	16	4	14	25	34	28	11	8	6	4	8	9	10	16	3	5	12	5	8	16	9	16	9	20	4	179
Homicide	2	..	..	..	..	4	..	..	..	..	..	1	1	..	..	..	..	..	2	..	..	..	..	..	..	..	2	6
Suicide	..	..	..	..	4	30	28	5	5	6	3	1	2	5	3	6	5	1	3	3	4	7	..	4	5	3	1	67
Ill-defined Causes	11	1	..	1	1	2	4	4	3	3	..	1	..	..	2	2	1	..	..	1	1	..	1	3	1	2	3	24

TABLE V.—Comparison of Prevalence of Sickness and Death from Infectious Diseases.

(Rates calculated per 1,000 persons on the population estimated to the middle of each year.)

Year.	Smallpox.		Scarlet Fever.		Diphtheria, Membranous Croup.		Typhus Fever.		Typhoid Fever.		Puerperal Fever.		Erysipelas.	
	Cases.	Deaths	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
*1890	—	—	7·31	0·49	0·69	?	0·00	—	0·66	0·14	0·03	0·00	0·97	0·04
*1891	0·11	0·02	3·42	0·21	0·48	?	—	—	0·93	0·18	0·03	0·01	0·86	0·03
1892	0·06	—	2·94	0·14	1·10	0·21	—	—	0·54	0·08	0·08	0·05	1·18	0·07
1893	2·01	0·14	3·31	0·14	0·79	0·17	0·01	—	1·00	0·19	0·11	0·08	1·75	0·05
1894	4·22	0·35	3·64	0·15	0·83	0·18	—	—	1·04	0·21	0·09	0·04	1·57	0·03
1895	0·20	0·02	6·00	0·27	1·50	0·43	—	—	0·88	0·17	0·05	0·03	1·65	0·04
1896	0·03	0·01	6·65	0·32	2·35	0·58	—	—	0·95	0·21	0·06	0·04	1·54	0·04
1897	—	—	3·81	0·19	1·41	0·32	0·00	0·00	1·06	0·18	0·03	0·02	1·16	0·04
1898	—	—	2·60	0·09	1·36	0·26	—	—	1·25	0·22	0·05	0·03	1·25	0·03
1899	—	—	2·44	0·06	1·40	0·29	—	—	1·52	0·23	0·06	0·03	1·23	0·04
1900	0·00	—	3·98	0·18	1·05	0·15	—	—	1·64	0·35	0·08	0·05	1·31	0·05
1901	—	—	6·35	0·29	1·02	0·16	—	—	1·18	0·21	0·06	0·05	1·39	0·04
1902	0·13	0·01	9·39	0·55	1·47	0·24	—	—	1·01	0·19	0·07	0·04	1·42	0·06
1903	0·47	0·02	5·33	0·27	1·66	0·25	—	—	0·65	0·12	0·06	0·04	1·21	0·04

* Prior to enlargement of City.

TABLE VI.

Number of Cases Reported under the Infectious Disease (Notification) Act, 1889, during each Week of the Year 1903.

Week.		Small Pox.	Scarlet Fever.	Diphtheria.	Membranous Croup.	Typhus Fever.	Typhoid Fever.	Simple Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Chickenpox.	Total.
Number.	Date of ending.													
	1903.													
1	January 10th	1	73	18	2	...	7	...	...	3	...	11	35	150
2	,, 17th	1	57	18	3	...	5	...	...	...	...	13	30	127
3	,, 24th	5	56	8	...	...	4	...	...	...	...	9	16	98
4	,, 31st	8	65	12	4	...	6	1	...	...	...	11	21	128
5	February 7th	6	75	17	2	...	10	..	...	...	...	19	24	153
6	,, 14th	16	54	7	3	...	15	..	..	...	..	18	25	138
7	,, 21st	8	72	14	2	...	7	...	...	1	...	18	28	150
8	,, 28th	10	54	16	2	...	17	...	...	1	...	8	27	135
9	March 7th	20	46	16	1	...	7	..	...	...	...	13	36	139
10	,, 14th	19	63	9	2	...	8	...	...	1	...	13	26	141
11	,, 21st	12	51	18	...	...	7	...	...	2	...	12	36	138
12	,, 28th	17	45	7	1	...	7	...	...	1	...	12	40	130
13	April 4th	8	60	5	2	...	9	...	...	2	...	13	35	134.
14	,, 11th	6	49	15	2	...	8	...	...	3	...	14	30	127
15	,, 18th	1	30	16	1	...	4	..	...	...	...	17	31	100
16	,, 25th ...	7	43	12	1	...	18	...	..	1	...	9	30	121
17	May 2nd	5	53	13	1	...	4	...	...	1	...	17	36	130
18	,, 9th	19	71	14	1	...	9	...	...	1		12	40	167
19	,, 16th	5	59	18	..	...	3	...	...	...	...	20	29	134
20	,, 23rd	3	59	15	2	..	3	...	...	...	...	16	50	148
21	,, 30th	7	70	16	2	...	8	..	...	...	...	12	48	163
22	June 6th	3	61	8	2	...	9	...	...	...	...	15	30	128
23	,, 13th	6	59	23	...	...	6	1	...	...	...	16	48	159
24	,, 20th	1	61	17	1	...	5	...	...	...	...	4	24	113
25	,, 27th	4	79	18	1	...	3	...	...	...	..	13	41	159
26	July 4th	...	47	17	1	...	4	...	...	...	...	5	40	114
27	,, 11th	1	55	28	1	...	6	...	...	1	...	10	31	133
28	,, 18th	...	57	20	2	...	4	...	...	1	...	12	37	133
29	,, 25th	...	66	18	1	...	2	...	...	...	...	14	43	144
30	August 1st	3	58	20	2	...	3	...	...	...	...	9	25	120
31	,, 8th	...	44	12	1	...	3	...	...	...	...	11	32	103
32	,, 15th	...	69	12	...	...	3	...	...	...	...	5	24	113
33	,, 22nd	...	61	14	...	...	2	..	...	..	...	14	30	121
34	,, 29th	...	37	16	...	...	5	...	...	...	...	9	23	90
35	September 5th	1	67	12	2	...	4	...	...	1	...	9	21	117
36	,, 12th	4	60	23	...	...	11	...	...	...	...	10	6	114
37	,, 19th	6	48	9	1	...	8	...	...	...	...	15	12	99
38	,, 26th	9	53	23	...	...	6	...	...	...	...	11	19	121
39	October 3rd	9	57	17	...	...	6	...	...	1	...	12	32	134
40	,, 10th	6	45	9	...	...	15	...	...	...	...	12	33	120
41	,, 17th	1	51	18	...	...	8	...	...	3	...	16	25	122
42	,, 24th	...	56	9	...	...	6	...	...	...	...	13	39	123
43	,, 31st	...	50	17	...	...	11	...	...	1	...	15	41	135
44	November 7th	...	48	18	...	...	10		...	2	...	6	39	123
45	,, 14th	...	46	18	1	...	8	...	...	...	...	12	37	122
46	,, 21st	...	37	31	1	...	5	..	...	1	...	9	49	133
47	,, 28th ...	6	48	22	1	...	7	...	...	1	...	10	42	137
48	December 5th	3	40	27	1	...	3	...	...	...	..	14	34	122
49	,, 12th	2	47	20	4	...	6	...	...	...	...	11	45	135
50	,, 19th	1	49	13	4	...	6	...	...	1	...	11	39	124
51	,, 26th	...	33	14	5	...	3	...	...	1	...	13	43	112
52	January 2nd, 1904	1	41	11	..	...	4	...	...	...	...	21	27	105
	Totals ...	251	2835	818	66	...	348	2	...	31	...	644	1684	6679

Cases removed to City Hospital:—Small Pox, 250; Scarlet Fever, 2,455; Typhoid Fever, 14

TABLE VII.

TEMPERATURE OF THE AIR AND GROUND, RAINFALL, SUNSHINE, AND WIND, IN EACH MONTH OF THE YEAR 1903.

Observed at the Birmingham and Midland Institute Observatory, Edgbaston, by Mr. Alfred Cresswell.

MONTH.	TEMPERATURE OF THE AIR. Highest in the shade. 1903.	TEMPERATURE OF THE AIR. Highest in the shade. Above or below the previous highest. *	TEMPERATURE OF THE AIR. Lowest in the shade. 1903.	TEMPERATURE OF THE AIR. Lowest in the shade. Above or below the previous lowest. *	TEMPERATURE OF THE AIR. Mean for the Month. 1903.	TEMPERATURE OF THE AIR. Mean for the Month. Above or below the average. *	TEMPERATURE OF THE GROUND. Maximum at 1 foot deep.	TEMPERATURE OF THE GROUND. Maximum at 4 feet deep.	HOURS OF SUNSHINE. 1903.	HOURS OF SUNSHINE. Above or below the average. *	RAINFALL IN INCHES. 1903.	RAINFALL IN INCHES. Above or below the average. *	DAYS ON WHICH 0·01 INCH OR MORE OF RAIN FELL.	MILES OF WIND. 1903.	MILES OF WIND. Above or below the average. *
JANUARY ...	51·8	− 6·2	21·6	+10·8	38·6	+ 1·5	44·3	45·9	22	− 13	1·97	+ 0·13	12	11458	+1495
FEBRUARY ...	58·2	− 3·7	29·9	+21·9	43·5	+ 6·4	46·0	45·0	49	− 5	1·41	− 0·07	9	12522	+3542
MARCH ...	60·6	− 4·2	31·8	+10·5	43·4	+ 3·2	46·2	45·0	74	− 14	4·63	+ 3·08	21	13265	+3063
APRIL ...	58·8	−20·2	26·9	− 0·1	42·8	− 2·4	46·6	45·3	102	− 14	1·64	+ 0·23	12	10364	+1261
MAY	74·8	− 2·8	36·3	+ 5·3	51·0	+ 0·2	53·0	48·3	103	− 39	2·67	+ 0·65	14	8475	− 699
JUNE	79·5	− 3·3	37·6	− 0·7	54·2	− 3·4	59·0	50·6	97	− 55	1·66	− 0·44	8	8948	+1064
JULY	83·8	− 4·2	45·0	+ 5·5	58·9	− 1·1	61·7	53·6	128	− 14	2·14	+ 0·02	16	8622	+ 254
AUGUST ..	73·4	−12·2	42·5	+ 1·3	56·8	− 2·1	57·0	53·8	148	+ 14	5·16	+ 2·33	18	9801	+1221
SEPTEMBER ...	71·0	−11·8	38·4	+ 5·4	54·7	− 0·7	56·3	53·4	129	+ 15	2·55	+ 0·76	15	8574	+ 434
OCTOBER .	62·5	− 7·5	37·2	+ 9·3	49·8	+ 2·5	54·6	53·0	78	+ 9	6·55	+ 4·03	26	11015	+2014
NOVEMBER ...	55·9	− 5·7	28·6	+ 7·8	42·9	− 0·1	48·4	50·6	36	+ 1	1·65	− 0·55	14	9646	+ 368
DECEMBER ..	50·0	− 6·0	26·0	+11·5	37·4	− 1·0	43·7	47·8	6	− 25	1·80	− 0·63	12	9367	−1004

* In the sixteen years 1887-1902.

TABLE VIII.

Temperature and Rainfall in each Month and Year from 1893 to 1903.

MONTH.	MEAN TEMPERATURE. (From Maximum, Minimum and 9.0 a.m. Readings.)											
	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	Average for 16 years 1887-1902	1903
	°	°	°	°	°	°	°	°	°	°	°	°
January ...	35·1	36·7	30·6	39·9	33·7	42·2	40·2	38·8	37·0	39·9	37·1	38·6
February	39·2	39·9	27·5	39·1	41·5	38·9	39·8	35·5	34·9	33·8	37·1	43·5
March ...	45·3	42·6	40·4	43·5	42·8	38·1	40·1	37·0	38·2	43·9	40·2	43·4
April ...	49·6	48·5	45·5	47·6	43·5	46·0	45·4	46·8	46·9	45·1	45·2	42·8
May ...	54·5	47·1	53·9	52·9	49·8	49·0	49·1	49·7	51·7	47·4	50·8	51·0
June ..	59·0	55·6	58·0	60·7	58·4	55·7	58·8	57·4	56·6	56·3	57·6	54·2
July ...	61·0	59·8	58·5	61·1	61·0	58·8	62·3	63·9	63·8	58·1	60·0	58·9
August ...	63·2	56·4	59·2	56·8	60·1	57·9	63·6	58·7	60·1	57·0	58·9	56·8
September	54·8	52·1	59·9	54·4	52·9	58·2	55·4	56·2	56·4	54·6	55·4	54·7
October ...	48·8	47·2	44·8	43·3	49·1	51·0	47·7	48·7	48·3	48·8	47·3	49·8
November	39·9	45·1	44·6	38·9	44·6	43·8	46·6	44·2	40·1	43·4	43·0	42·9
December	39·5	40·1	38·0	38·1	39·8	44·4	35·7	43·7	37·2	39·4	38·4	37·4
Year ...	49·2	47·6	46·7	48·0	48·1	48·7	48·7	48·4	47·9	47·3	47·6	47·8

MONTH.	TOTAL RAINFALL.											
	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	Average for 16 years 1887-1902	1903
January ...	1·75	1·61	3·92	1·15	1·89	0·83	3·44	3·53	1·37	1·02	1·84	1·97
February	2·56	2·05	0·32	0·56	2·54	1·47	1·99	4·28	1·34	1·60	1·48	1·41
March ..	0·50	1·05	1·91	2·68	3·14	0·63	1·02	0·70	1·76	1·59	1·55	4·63
April ...	0·33	1·62	2·37	1·33	2·02	1·85	2·40	0·92	1·95	2·49	1·41	1·64
May ..	2·08	2·01	0·82	0·21	1·20	2·62	2·20	2·09	1·11	2·95	2·02	2·67
June ...	1·08	2·16	0·89	1·91	4·13	1·06	3·28	2·41	1·84	2·40	2·10	1·66
July ...	1·64	3·36	3·25	1·25	0·95	1·29	1·10	1·74	3·13	1·59	2·12	2·14
August ...	2·25	2·12	2·75	1·74	3·81	2·57	1·08	2·89	2·13	4·43	2·83	5·16
September	1·72	1·70	0·45	4·34	2·48	0·64	2·80	0·80	0·65	1·49	1·79	2·55
October ...	2·45	3·48	2·81	2·50	1·31	2·74	2·37	3·08	1·84	2·33	2·52	6·55
November	1·38	2·48	3·41	1·26	1·96	2·51	1·49	2·40	1·23	2·23	2·20	1·65
December	3·02	1·88	1·99	3·34	2·78	2·24	1·95	4·25	4·29	1·86	2·43	1·80
Year ...	20·76	25·52	24·89	22·27	28·21	20·45	25·12	29·09	22·64	25·98	24·29	33·83

TABLE IX.

SUMMARY OF NUISANCES ABATED AND OTHER WORK DONE DURING THE YEARS 1902 AND 1903.

	1901.	1902.	1903.
GENERAL SANITARY WORK.			
Houses cleansed (walls and ceilings) ...	2,460	2,101	**1,974**
Houses repaired	2,463	2,935	**3,858**
Houses closed under the P. H. Act ...	110	82	**8**
Houses demolished under the P. H. Act ...	43	5	**10**
Houses put in habitable condition under the P. H. Act	105	39	**68**
Houses provided with better ventilation ...	79	200	**241**
Cases of overcrowding remedied	59	40	**52**
Accumulations of water in cellars removed	315	321	**435**
Rain-water Spouts repaired or disconnected	652	790	**784**
Ashpit Privies converted to water closets...	718	874	**621**
Pan Privies converted to water closets ...	486	871	**2,395**
Privies and Closets limewashed	785	824	**522**
Water Closets repaired or altered	703	792	**875**
Ashplaces repaired or reconstructed ...	324	378	**416**
Additional Water Closets provided ...	98	113	**199**
Additional Ash Tubs provided	868	1,373	**1,476**
Soilpipes removed from inside houses ...	12	15	**12**
Urinals repaired or reconstructed... ...	161	214	**118**
Drains relaid or repaired	439	453	**482**
Drains opened and cleansed	2,665	2,523	**2,545**
Drains efficiently trapped	1,765	1,717	**1,793**
Drains in cellars disconnected from the sewer or abolished	80	119	**102**
Drains in stables removed	8	19	**35**
Sink Drains disconnected from the sewer...	60	47	**62**
Sink Bend Pipes repaired or affixed ...	301	324	**266**
Sanitary Sinks provided	—	—	**103**
Premises supplied with additional drains...	75	133	**114**
Overflow Pipes disconnected from drains ...	22	22	**60**
Smoke Tests applied to drains	86	69	**78**
Sanitary Defects discovered thereby ...	254	110	**140**
Back Yards paved	199	108	**97**
Back Yards repaired	413	316	**274**
Washhouses repaired	247	262	**298**
Premises from which fowls have been removed	120	105	**116**
Nuisances from swine and swine styes abated	26	24	**22**
Accumulations of wash, manure, etc., removed	638	519	**406**

TABLE IX.—*continued.*

	1901.	1902.	1903.
Receptacles for manure provided	30	8	**34**
Dangerous Premises reported to the Public Works Department	282	617	**638**
Defective Water Fittings reported to Water Department	982	790	**900**
Premises supplied with Corporation water.	7	2	**3**
Wells closed	6	2	**4**
No of persons summoned	48	47	**46**
Amount of penalties	£13/0/0	£2/16/0	**£7/15/0**
,, costs	£14/18/-	15/19/0	**£5/10/0**
LODGING HOUSES.			
Registered Common Lodging Houses ...	76	72	**71**
Lodgers allowed	2,522	2,587	**2,522**
Registered Houses let in lodgings... ...	178	228	**250**
Lodgers allowed	847	1,198	**1,307**
Visits by day	12,763	16,093	**14,895**
,, night	914	1,226	**1,141**
Persons found occupying the houses ...	18,912	25,492	**26,335**
Houses let in lodgings registered	81	89	**46**
Common lodging houses registered ...	—	—	**1**
Houses let in lodgings closed	14	39	**24**
Common lodging houses closed	2	4	**2**
Contraventions remedied	14	9	**8**
Keepers summoned	14	9	**8**
Amount of penalties	£10/0/0	£8/2/6	**£9/0/0**
,, costs	£4/19/0	£3/14/0	**£3/4/0**
SHOP HOURS ACTS.			
Visits made by Inspectors	1,069	1,456	**1,704**
Persons summoned	1	8	**8**
Amount of penalties	£1/0 0	£1/5/0	**£3/10/0**
,, costs	£0/14/0	£4/1/6	**£5/8/0**
SEATS FOR SHOP ASSISTANTS ACT.			
Visits made by Inspectors	998	1,439	**1,686**
Persons summoned	—	1	**2**
Amount of penalties	—	£0/2/6	**£1/0/0**
,, costs	—	£0/8/0	**£0/12 0**

TABLE IX.—*continued.*

	1901.	1902.	1903.
WORK DONE BY CLEANSING STAFF.			
Courts cleansed	3,573	4,577	4,638
Notices served on tenants	1,207	1,956	1,724
Notices complied with by tenants	1,195	1,709	1,658
Amount collected	£132/12/10	166/7/6	165/3/5
Privies limewashed	108		324
Sheds limewashed	33	A small amount of lime-washing was done during 1902	80
Wash-houses limewashed	43		107
Walls limewashed	31		63
Urinals limewashed...	8		12
Houses stripped and limewashed	143	311	386
Amount charged	£101/3/3	175/7/2	258/18/3
Pan privies cleansed	79,261	86,493	76,020
Drain traps cleansed	159,949	176,274	179,129
Tubsheds cleansed	64,246	73,058	72,992
Gutters cleansed	70,626	79,004	70,592
HEALTH VISITORS' WORK.			
Number of visits	23,504	31,977	26,170
Number of revisits	8,528	10,131	13,820
Houses in which illness existed	7,361	8,788	7.221
Number of Tenants urged to—			
Clean rooms	4,207	3,679	1,951
Remove filth from cellar	917	3,027	2,085
Destroy rubbish	643	470	655
Remove bedroom slops	5,990	6,518	3,217
Open windows	6,663	7,521	3,935
Unstop chimneys	2,001	1,986	1,109
Cleanse bedding	1,620	1,781	856
Use additional bedroom	427	552	522
Screen off beds	214	144	264
Get larger house	262	344	163
Provide additional beds	166	245	211
Get rid of lodgers	69	57	32
Wash children	770	595	355
Feed infants suitably	337	563	622
Obtain medical advice	1,094	1,561	764
Clean yard and outhouses	?	573	761

TABLE X.

Return for the Period 1st July, 1902, to 30th June, 1903, respecting the Vaccination of Children whose Births were Registered in the City during the said Period.

	Number of Births returned in the "Birth List Sheets" as Registered.	Number of these Births duly entered in Columns I., II., IV., and V. of the "Vaccination Register" (Birth List Sheets), viz. :					Number of these Births which remained unentered in the "Vaccination Register" on account (as shown by Report Book) of			Number of these Births remaining neither duly entered in the "Vaccination Register" (cols. 3, 4, 5, 6 and 7 of this Return) nor temporarily accounted for in the "Report Book" (cols. 8, 9, and 10 of this Return).
		Col. I.	Col. II.		Col. IV.	Col V				
		"Successfully Vaccinated."	"Insusceptible of Vaccination."	"Had Smallpox."	"Number in respect of whom Certificates of conscientious objection have been received."	"Dead Unvaccinated."	Postponement by Medical Certificate.	Removal to Districts the Vaccination Officer of which has been duly apprised	Removal to places unknown or which cannot be reached; and cases not having been found.	
1	2	3	4	5	6	7	8	9	10	11
Birmingham Parish ...	7,979	6,151	22	—	35	973	78	83	617	20
Aston Union (within the City)	7,070	5,262	31	—	32	839	198	113	359	236
King's Norton Union (within the City) ...	1,718	1,424	18	1	16	124	35	21	71	8
Total ...	16,767	12,837	71	1	83	1,936	311	217	1,047	264

TABLE XI.—WATER: RESULTS OF ANALYSIS EXPRESSED IN PARTS PER 100,000.

(Supplied by Mr. J. F. Liverseege, F.I.C. (City Analyst).

Date of Receipt of Sample	Description	Temperature in Centigrade Degrees.	Total Solid Matter	Organic Nitrogen.	Albuminoid or Organic Ammonia.	Free Ammonia.	Nitrogen as Nitrates and Nitrites.	Oxygen Absorbed in 4 Hours, at 27°C. (80° F.)	Previous Sewage Contamination (Estimated).	Chlorine.	Hardness.			Remarks.
											Temporary.	Permanent.	Total.	
1903.	**CORPORATION SUPPLY.**													
Jan. 6th	Courts, rear of 103 Liverpool St.	6·4°	28·8	·04	·014	none	·20	·13	1,700	1·8	6·5°	15·0°	21·5°	Clear; pale green.
Feb. 9th	21 Court, Tower Street ...	6·7°	36·0	·03	·013	·001	·35	·10	3,200	2·8	6·0°	16·0°	22·0°	Very slightly turbid; pale green.
Mar. 10th	Rear of 83 and 85 High Street, Harborne	4·4°	32·8	·02	·010	·001	·20	·09	1,700	2·3	7·5°	14·0°	21·5°	Clear; pale green.
April 7th	Rear of Nos. 32 & 33 River St.	8·3°	31·2	·02	·011	none	·15	·13	1,200	1·9	7·0°	14·0°	21·0°	Clear; pale green
May 5th	Rear of Nos. 27 & 33 Henley St.	10·0°	34·4	·03	·013	·001	·30	·08	2,700	2·8	6·5°	14·0°	20·5°	Very slightly turbid; pale green.
June 8th	Rear of Nos. 127 & 129 Peel St.	15·0°	32·8	·04	·010	none	·20	·10	1,700	2·5	6·0°	15·5°	21·5°	Very slightly turbid; pale green.
July 9th	5 Court, Nechells Park Road...	17·5°	32·0	·04	·018	·001	·10	·15	700	2·0	10·0°	12·5°	22·5°	Very slightly turbid; greyish green.
Aug. 5th	Rear of 89 & 91 Ledsam Street	16·1°	29·6	·04	·009	none	·20	·08	1,700	2·5	8·0°	9·5°	17·5°	Very slightly turbid; pale green.
Sept. 7th	34 and 35 Bellis Street ...	15·0°	33·2	·03	·011	·001	·25	·14	2,200	2·5	6·0°	15·0°	21·0°	Very slightly turbid; pale green.
Oct. 7th	9 court, Cheapside ...	14·4°	36·0	·04	·019	none	·10	·29	700	1·8	11·0°	16·5°	27·5°	Very slightly turbid; yellowish green.
Oct. 15th	Ditto ditto ... (after flushing of the main)	13·0°	29·2	·02	·015	none	·15	·10	1,200	1·8	7·0°	10·0°	17·0°	Very slightly turbid; pale green.

Nov. 10th	20 Court, Heaton Street ...	8·9°	33·2	·03	·016	none	·30	·25	2,700	2·1	8·0°	12·5°	20·5°	Very slightly turbid; pale green.
Nov. 23rd	Ditto ditto ...	—	33·2	·04	·014	none	·20	·17	1,700	2·1	9·0°	11·5°	20·5°	Very slightly turbid; pale green.
Dec. 9th	(after flushing of the main) St. John's Terrace, North Road	5·5°	34·0	·04	·008	none	·35	·14	3,200	2·4	7·5°	13·5°	21·0°	Very slightly turbid; pale green.
	Average Results ...1903	10·9	32·6	·03	·013	·000	·22	·14	1,880	2·2	7·6°	13·5°	21·1°	
	,, ,, ...1902	10·0	33·4	·03	·011	·001	·23	·13	1,990	2·3	6·8	15·0	21·8	
	,, ,, ...1901	10·7	33·1	·03	·008	·000	·19	·12	1,570	2·3	9·0	14·5	23·5	
	,, ,, ...1900	10·4	32·2	·03	·010	·000	·20	·13	1,660	2·4	8·0	12·5	20·5	
	,, ,, ...1899	11·3	31·8	·03	·011	·031	·22	·14	1,850	2·4	6·3	12·9	19·2	
	WELL WATER.													
Mar 10th	**80 and 81 Sherbourne Road...	...	190·0	...	·009	·001	9·9	·09	99,000	13·9	...	...	120·0°	Clear; pale green.
April 29th	" Normanhurst," Washwood Heath Road	...	136·0	...	2·100	·800	1·60	5·30	22,000	13·0	...	...	45·0	Very turbid; grey. Considerable froth on shaking.
May 28th	454 Moseley Road	...	80·0	...	·006	·002	1·40	·10	1,400	6·9	...	...	59·0	Very slightly turbid; pale green.
Aug. 11th	*282 & 284 in front and 1 & 2 at the rear in Balsall Heath Rd.	...	123·0	...	·004	none	2·9	·08	29,000	9·3	..	...	93·0	
Aug. 17th	†47, 49, 51 & 53 Oldfield Road...	...	129·0	...	·009	·002	6·0	·08	60,000	8·3	...	..	81·0	
Dec. 31st	Toll House, Sandy Lane ...	...	106·0	...	·002	none	1·9	·10	19,000	9·2	...	...	54·0°	Very slightly turbid; pale green.

** Diphtheria. * Scarlet Fever. † Scarlet Fever and Diphtheria.

TABLE XII.

Number of Deaths in each Street in the City of Birmingham during the Year. 1903

STREETS.	Zymotic Diseases.	Other Diseases.	STREETS.	Zymotic Diseases.	Other Diseases.	STREETS.	Zymotic Diseases.	Other Diseases.
A			Balfour Street	1	2	Brickiln Street		
A B Row		2	Balsall Heath Road	1	30	Bridge Road		7
Abberley Street		3	Banbury Street		5	Bridge Street		2
Abbey Road	1		Bangor Road	1	1	Bridge Street West	5	47
Abbey Street	1	7	Banks Road	1	2	Brighton Road	1	8
Abbotsford Road		1	Barford Road		13	Bristol Road		13
Aberdeen Street	1	8	Barford Street	5	37	Bristol Street	1	9
Ada Street			Barker Street		5	Brixham Road		3
Adams Street	4	9	Barlow's Road			Broad Street	2	7
Adderley Road	1	24	Barn Street	3	13	Bromford Lane		
Adderley Street	3	3	Barnsley Road		1	Bromley Street	2	3
Addison Road		3	Barr Street	3	26	Bromsgrove Street	1	16
Adelaide Street	1	6	Barrack Street		2	Brook Road		
Albany Road			Barrows Road		5	Brook Street	1	
Albert Road			Bartholomew Row	1	3	Brookfield Road		6
Albert Street		1	Bartholomew Street		16	Broom Street	1	2
Albion Street		6	Barwell Road	1	5	Browning Street	2	3
Alcester Street	2	17	Barwick Street			Brueton Street		
Alder Drive			Bath Passage			Brunswick Road	2	18
Alder Road			Bath Row	1	6	Bryant Street		2
Alexandra Road		3	Bath Street		6	Buck Street		6
Alexandra Street		6	Beach Street	1	8	Buckingham Street	1	13
Alfred Street		2	Beaconsfield Road		4	Bull Ring		3
Algernon Road		2	Beak Street		2	Bull Street, Harborne		1
Allcock Street	2	7	Beaufort Road			Bull Street, Market Hall		1
Allen's Road		4	Bedford Road			Bullock Street	1	7
Allesley Street	1	5	Beech Lanes		3	Burbury Street	2	7
Allison Street	2	20	Beechfield Road		4	Burlington Road	2	5
All Saints' Road		1	Belchers Lane		1	Burney Lane		
All Saints' Street			Belgrave Road	6	30	Butler Street	1	5
Alma Crescent		6	Bellbarn Road	3	43	Butler Street South		2
Alma Street			Bellefield Road		5	Butlin Street		2
Alston Street	1	10	Bellis Street		3	Byron Road		0
Alum Rock Road	2	16	Belmont Passage		3	**C**		
Ampton Road		1	Belmont Row	1	12	Calthorpe Road		
Anderton Road	1	9	Benacre Street	3	15	Cambridge Crescent		
Anderton Street		18	Bennett's Hill		1	Cambridge Street		7
Anderton Park Road			Bennett's Road		3	Camden Drive		4
Andover Street			Benson Road	1	8	Camden Grove		3
Angelina Street	5	25	Berkley Street		1	Camden Street	4	45
Annandale Road			Berners Street		2	Camp Hill	1	9
Anthony Road	2	3	Berry Road	3	3	Camp Street	3	2
Arden Road	2	8	Berry Street		1	Canal Street		7
Argyle Street	3	13	Bertram Road		2	Cannon Street		
Arley Road	1	9	Betholom Row			Cannon Hill Road		2
Armoury Road		5	Birchall Street	2	3	Cape Street		4
Arsenal Street	1	1	Birchwood Crescent		4	Cardigan Street	2	8
Arter Street		4	Birchwood Road		4	Carlisle Street	1	12
Arthur Place	1		Bishop Street	2	18	Carlton Road	2	9
Arthur Road			Bishopsgate Street	5	26	Carlyle Road	1	6
Arthur Street	11	40	Bissell Street	2	18	Carnarvon Road		
Artillery Street	1	4	Blackford Street	1		Caroline Street		1
Ash Road	2	8	Black Pit Lane			Carpenter Road		2
Ashbourne Road		3	Blake Lane	1	4	Carrington Road		9
Ashfield Road			Blakeland Street		9	Carrs Lane		
Ashford Street		4	Blews Street	1	12	Cartland Road		
Ashley Street	4	22	Bloomsbury Street	1	29	Carver Street	1	14
Ashted Row	1	8	Blucher Street		10	Castle Street		1
Aston Road	7	22	Blythe Street	2	13	Cathcart Street	1	6
Aston Street		7	Bolton Road	6	32	Cato Street	5	18
Aston Brook Street	3	8	Bolton Street	2	2	Cato Street North		3
Aston Church Road	3	12	Bond Street			Cattell Road	6	21
Asylum Road		7	Bordesley Green	4	14	Cattell's Grove		5
Athole Street		2	Bordesley Street	2	18	Cavendish Road		1
Atlas Road			Bordesley Green Road	1	11	Cecil Street	1	23
Auckland Road		14	Bordesley Park Road	8	18	Cemetery Lane		
Augusta Street			Bow Street	1	10	Chad Road		2
Augustus Road		1	Bowyer Road	1	4	Chandos Road		
Austin Street		6	Bowyer Street			Chapel Street		6
Avenue Road			Bracebridge Street	1	16	Chapel House Street		1
Avery Road		1	Bradford Street	3	21	Chapman Road		4
B			Braithwaite Road		1	Charles Road	6	13
Bacchus Road	4	8	Branston Street	1	6	Charles Arthur Street	2	10
Bagot Street	2	11	Brass Street		5	Charles Henry Street	6	39
Bailey Street			Bresshouse Passage			Charlotte Road		2
Baker Street	1	4	Brearley Street	10	39	Charlotte Street	1	
Balden Road			Brewery Street		1	Chartist Road		6

NOTE.—Deaths in hospitals, workhouses, asylums, and other public places have been referred as far as possible to the streets in which the deceased person had resided.

STREETS.	Zymotic Diseases.	Other Diseases.
Chattaway Street	1	4
Cheapside	4	33
Cheatham Street		1
Chequers Walk		
Cherry Street		
Cherrywood Road	5	16
Chester Street		6
Chesterton Road	1	10
Cheston Road		1
Chicheley Street		1
Chiswell Road		4
Church Road		1
Church Street		
City Road		8
Claremont Road		
Clarence Road		5
Clarendon Road		2
Clark Street	1	14
Claverdon Street	1	4
Claybrook Street	1	1
Clayton Road	1	2
Clement Street	2	3
Cleve Terrace		
Clevedon Road		3
Clifton Road	3	21
Clinton Road		
Clissold Street		6
Cliveland Street		5
Clodeshall Road	3	3
Clyde Street	1	6
Coleman Street	2	16
Coleshill Street	2	17
College Road	1	6
College Street	2	6
Colmore Row		2
Colville Road		10
Commercial Street		1
Common Lane		
Communication Row	2	8
Congreve Street		1
Constance Road		2
Constitution Hill	3	7
Conway Road		
Conybere Street	2	13
Cook Street	1	9
Cooksey Road	7	34
Cope Street		8
Coplow Street	1	11
Coralie Street		1
Cornwall Street		1
Coronation Road		
Corporation Street		1
Cotterill's Lane		
Couchman Road	2	7
Court Road		3
Court Oak Road		2
Coventry Road	5	39
Coventry Street	1	9
Cowper Street	3	9
Cox Street		7
Cox Street West		9
Coxwell Road		1
Crabtree Road	1	7
Cradock Road	3	5
Cranbury Street		1
Cranby Street	2	8
Cranemore Street		3
Crawford Street		3
Cregoe Street		15
Creseent	1	7
Cromer Road		1
Crompton Road		2
Cromwell Street	6	39
Crosbee Road		
Crown Road	1	
Cuckoo Road	2	13
Cumberland Street		2
Curzon Street	2	6
Cuthbert Road	1	8
Cyril Road	1	6
D		
Daisy Road	1	4
Dale End		5
Dallwood Road		
Dalton Street		
Darnley Road		
Dart Street		2
Dartmouth Street	6	12
Darwin Street	13	29
Dawson Street		2
Dean Street		3
Dearman Road		6
Defford Road		2
Denbigh Street	1	1
Dennis Road		5
Derby Street		7
Devon Street	5	20
Devonshire Street	5	19
Digbeth		8
Digby Street		4
Dixon Road		3
Doe Street		8
Dolman Street	2	11
Dolobran Road		6
Don Street		8
Dora Road		
Doris Road	3	3
Dorset Road		
Dover Street		
Drayton Road		4
Drew's Lane		
Drury Lane	2	2
Dryden Road		
Duchess Road		2
Duddeston Row	3	13
Duddeston Mill Road	4	14
Dudley Road	1	11
Dudley Street		1
Dugdale Street	2	7
Duke Street	1	9
Dunton Road		4
Dymoke Street	3	10
E		
Earl Street		1
Eastern Road		
Easy Row		
Edgbaston Road		2
Edgbaston Street		1
Edgbaston Park Road	1	1
Edmond Road		
Edmund Street		1
Edward Road		12
Edward Street	1	10
Eldon Road		1
Eliot Street	1	3
Elkington Street		2
Ellen Street	2	11
Ellis Street	2	7
Elm Tree Road		
Elvetham Road		
Emerson Road		
Emily Street	9	16
Emmeline Street		
Enfield Road		
Erasmus Road		6
Ernest Street		
Ernest Road	1	1
Erskine Street	2	2
Essex Street	1	11
Essington Street	3	8
Ethel Road		1
Ethel Street		
Eton Road		1
Eva Road		8
Eversley Road	1	15
Exeter Street		2
Eyre Street	1	7
F		
Factory Road		5
Falconer Road		
Fallows Road	1	5
Farm Road		1
Farm Street	14	40
Farquhar Road		1
Farquhar Road East		
Fawdry Street		2
Fazeley Street	1	7
Fellows Lane		
Fifth Avenue		4
Finsbury Road		
Fisher Street	1	13
Floodgate Street	1	11
Florence Street		7
Floyer Road	1	5
Ford Street	3	17
Fordrough Lane		
Forster Street		2
Foundry Road	1	7
Fountain Road		
Fourth Avenue		1
Fowler Street		2
Fox Street	1	4
Francis Road		2
Francis Street	5	31
Frank Street		2
Frankfort Street	5	12
Franklin Street		6
Frederick Road		5
Frederick Street		4
Freeman Road	1	8
Freeman Street		
Freeth Street		8
Friston Street		13
G		
Galton Street	1	2
Garbett Street	5	20
Garrison Lane	6	32
Garrison Street	4	9
Gas Street		1
Gate Street	1	
Geach Street	2	5
Gee Street		5
Gem Street	1	7
George Arthur Road		5
George Road		7
George St., Balsall H'th.	1	5
George Street, St. Paul's	1	4
George Street West	3	17
Gibb Street	3	1
Gillhurst Lane		4
Gillott Road		9
Gladstone Road		4
Glebe Street	1	3
Gloucester Street		1
Glover Street	1	12
Glover's Road	2	7
Godwin Street		9
Golden Hillock Road	1	10
Gooch Street	2	23
Goode Street	1	8
Goodrick Street		4
Gopsall Street		6
Gordon Road		3
Gordon Street	1	2
Gosford Street		2
Gosta Green		4
Gough Road		10
Gough Street		3
Grace Road	1	5
Grafton Road		1
Graham Street	2	9
Grange Road	4	13
Grant Street		5
Grantham Road		5
Granville Street	3	8
Gray Street		1
Gray's Road		1
Great Barr Street	6	8
Great Brook Street		16
Great Charles Street	1	1
Great Colmore Street		24
Great Francis Street	6	31
Great Hampton Row	4	21
Great Hampton Street	2	18
Great King Street	1	15
Great Lister Street	5	20
Great Russell Street	10	28
Great Tindal Street	1	14

STREETS.	Zymotic Diseases.	Other Diseases.
Green Lane	3	18
Green Street, Deritend	1	3
Green Street, Saltley		
Greenfield Crescent		
Greenfield Road		6
Greenway Street	6	21
Grosvenor Road		2
Grosvenor Street		2
Grosvenor Street West	3	16
Grove Lane		
Grove Street	1	
Guest Street		1
Guildford Street	3	10
Guthrie Street		
H		
Hack Street		3
Haden Street		4
Hadley Street		4
Hagley Road		11
Halberton Street		3
Hall Road		
Hall Street		3
Hallam Street		6
Hampden Street		3
Hampton Street	1	11
Hams Road	1	
Handsworth New Road		4
Hanley Street	2	7
Hanover Street		5
Harborne Road		6
Harborne Park Road	1	4
Harbury Road		2
Harding Street		5
Harford Street		5
Harold Road		1
Harris Road		
Harrison's Road		2
Hart's Road	3	
Hartop Road		6
Hatchett Street	2	14
Havelock Road	1	10
Hawkes Street	1	13
Hawthorn Road		
Heath Street	6	42
Heath Street South	1	4
Heath Green Road	1	3
Heath Mill Lane	1	13
Heaton Street	5	15
Helena Street		
Heneage Street	7	24
Henley Street		4
Henn's Walk		
Henrietta Street		
Henry Street	1	13
Henshaw Road		3
Herbert Road	2	20
Hermitage Road		
Herrick Road		8
Hertford Road		3
Hicks Square		1
Hick Street	1	3
Hickman Road		2
High Street		2
High Street, Bordesley, and Deritend	4	33
High Street, Harborne	2	11
High Street, Saltley	4	5
Highfield Rd., Edgb'ton		1
Highfield Road, Saltley	1	11
Highgate Place		
Highgate Road	2	15
Highgate Square		
Highgate Street	3	24
High Park Street	1	3
Hill Street	1	4
Hinckley Street		
Hingeston Street	5	15
Hobmoor Road		3
Hockley Hill	1	5
Hockley Street		8
Holborn Hill		2
Holder Road		

STREETS.	Zymotic Diseases.	Other Diseases.
Holland Street		6
Holliday Street	2	8
Hollier Street		2
Holloway Head	1	16
Holly Road	1	
Holmwood Road		5
Holt Street		10
Homer Street		6
Hooper Street	1	
Hope Street	6	27
Horse Fair		1
Hospital Street	9	51
Howard Street	2	7
Howe Street	4	3
Hubert Street		2
Hugh Road	1	4
Humpage Road	1	6
Hunter's Road		
Hunter's Vale		1
Hurst Street	2	24
Hutton Road		2
Hyde Road		3
Hylton Street		
I		
Icknield Square	3	7
Icknield Street	1	19
Icknield Port Road	8	32
Imperial Road	3	
Inge Street		5
Ingleby Street	1	5
Inkerman Street	3	18
Irving Street	5	25
Islington Row		8
Ivy Lane	1	2
J		
Jakeman Road	1	6
Jakeman Walk		2
Jamaica Row		2
James Street		2
James Turner Street	1	5
James Watt Street	2	
Jenkins Street	1	4
Jennens Row		4
Jersey Road		
John Bright Street		
Johnson Street	1	5
Johnstone Street	1	3
K		
Keeley Street		2
Kendal Road		2
Kenelm Road		4
Kent Street	1	6
Kent Street North	3	5
Kenyon Street	1	4
Key Hill	2	12
King Street		3
King Alfred's Place	1	5
King Edward's Place		1
King Edward's Road		26
Kingscote Road		1
Kingsley Road		3
Kingston Road		4
Kingswood Road		3
Kirby Road		1
Kitchener Street	1	2
Knutsford Street		4
Kyott's Lake Road		2
Kyrwick's Lane	1	13
L		
Ladypool Road		18
Ladywell Passage		1
Ladywell Walk		
Ladywood Road		14
Lancaster Street	1	13
Landor Street	5	14
Langley Road	2	4
Lansdowne Street	3	4
Larches Street	1	11

STREETS.	Zymotic Diseases.	Other Diseases.
Latimer Street	2	27
Lawden Road	2	14
Lawford Street	1	2
Lawley Street	6	25
Lawrence Street		4
Lawson Street		
Laxey Road		4
Leach Street	1	2
Leamington Road		5
Lease Lane	1	2
Ledsam Street	2	16
Lee Bank Road	1	18
Lee Crescent		1
Lee Mount		
Leek Street		1
Lees Street	1	4
Legge Lane		1
Legge Street	1	11
Leigh Road		
Lench Street		
Lennox Street	2	
Leonard Street		
Leopold Street	1	19
Leslie Road	1	1
Lime Grove		
Lincoln Street		6
Lingard Street	1	11
Link Road		
Lionel Street		4
Lister Street	2	8
Little Ann Street		6
Little Barr Street	1	3
Little Bow Street		2
Little Broom Street		7
Little Edward Street		1
Little Francis Street	1	1
Little Green Lane	4	19
Little King Street		6
Little Shadwell Street		
Liverpool Street		4
Livery Street		2
Lloyd Street		1
Lodge Road	1	21
Lombard Street		3
Long Acre	3	23
Long Street		5
Longbridge Road		3
Longmore Street		12
Lonsdale Road		4
Lord Street	3	5
Lordswood Road		3
Louisa Street		1
Love Lane		2
Loveday Street	1	2
Lowe Street		2
Lower Dartmouth Street	1	9
Lower Darwin Street		3
Lower Essex Street	2	6
Lower Loveday Street		
Lower Priory		
Lower Temple Street		
Lower Tower Street	7	29
Lower Trinity Street	2	9
Loxton Street		4
Ludgate Hill		1
Lupin Street	3	10
Lyttelton Road		
M		
Macdonald Street	3	10
Magdala Street		2
Main Street	1	11
Malins Road		
Malmesbury Road	4	8
Malthouse Lane	1	7
Malvern Street		2
Malvern Hill Road		2
Manchester Street	1	5
Manor Road		
Mansell Road		4
Margaret Road		
Margaret Street		
Mark Lane		

STREETS.	Zymotic Diseases.	Other Diseases.
Markby Road	3	8
Market Street	1	1
Marlborough Road		1
Marroway Street		10
Marshall Street		5
Marshall Street South		7
Martineau Street		
Mary St., Balsall Heath	4	16
Mary Street, St. Paul's		
Mary Ann Street		1
Masshouse Lane		
Maxstoke Street	1	2
Meadow Road		
Medlicott Road		3
Melville Road		
Membury Road		3
Meriden Street		11
Metchley Lane		6
Metchley Park Road		1
Metropolitan Road		
Midland Street	2	5
Miles Street	3	12
Milk Street	7	14
Mill Lane		5
Mill Street	1	3
Miller Street	2	12
Milton Street		6
Milward Street		7
Moat Lane		
Moat Row		
Moilliett Street	1	8
Moland Street	2	20
Mole Street	1	5
Mona Road		6
Montague Road		
Montague Street	1	3
Montgomery Street	1	2
Montpellier Street		1
Monument Road	5	28
Moor Street	1	11
Moore's Row	1	3
Moorsom Street	7	16
Moreton Street	2	5
Morville Street	1	11
Moseley Road	3	30
Moseley Street	3	18
Mostyn Road		3
Mott Street	1	6
Mount Pleasant	1	2
Mount Street	1	8
Muntz Street	1	13
Musgrave Road	4	3
Myddleton Street		3
N		
Nansen Road	1	1
Navigation Street		2
Nechells Place		7
Nechells Park Road	2	28
Needham Street		
Needless Alley		
Nelson Street	5	15
New Road		
New Street		3
New Bartholomew Street		5
New Bond Street		3
New Canal Street	1	15
Newdegate Street		3
Newhall Hill		8
Newhall Street		9
New John Street	4	20
New John Street West	10	52
New Market Street		
New Meeting Street		1
Newport Road		3
New Spring Street	3	18
New Summer Street	4	26
Newton Street		5
Newtown Row	6	26
Nigel Road	1	4
Nile Street		
Nineveh Road		2
Noel Road		1
Norfolk Road		2
Norman Street	1	11
North Road		5
Northampton Street		2
Northbrook Street		6
Northfield Road	1	4
Northumberland Street	1	2
North Warwick Street		
Northwood Street	4	6
Norton Street		9
Norwood Road	1	
Nova Scotia Street	2	7
Nursery Road		1
O		
Oakfield Road		3
Oakley Road		2
Old Square		
Old Church Road		
Old Cross Street		2
Oldfield Road		17
Oldknow Road		7
Old Meeting Street		
Oliver Road		1
Oliver Street		10
Ombersley Road		10
Oozells Street		2
Oozells Street North	1	2
Orchard Road		2
Orford Road	1	
Ormond Street		10
Osborn Road		5
Osler Street	3	17
Oughton Place	1	3
Owen Street	1	9
Oxford Street		4
Oxygen Street		4
P		
Paddington Street	5	6
Paignton Road		1
Pakenham Road		1
Palace Road	3	1
Palmer Street	2	2
Palmerston Road		2
Parade		1
Paradise Street		1
Park Lane	1	3
Park Road	4	25
Park Street	3	16
Parkfield Road		2
Park Hill Road		4
Parker Street	1	8
Parliament Street	1	8
Paxton Road		4
Pearson Street		3
Pebble Mill Road		
Peel Street	1	15
Pemberton Street		1
Pembroke Road		
Penn Street	1	4
Percival Road		
Perrot Street	1	6
Pershore Road		8
Pershore Street	2	15
Phillimore Road	1	2
Phillip Street		
Pickford Street		6
Piddock Street		4
Pigott Street		6
Pitney Street		
Pitsford Street		2
Pitt Street		
Plough and Harrow Road		1
Plume Street		
Pope Street	3	14
Poplar Avenue		1
Poplar Road		1
Porchester Street		4
Porthope Road		1
Portland Road		1
Potter Street	1	2
Powell Street		5
Premier Road		2
Prescott Street	1	10
Preston Road	1	12
Pretoria Road	3	4
Price Street	1	16
Priestley Road		5
Prince Albert Street		2
Prince Arthur Road		
Princes Row	1	3
Princes Street		1
Princess Road		4
Princip Street	3	4
Priory Road		
Pritchatt's Road		
Pritchett Street	4	21
Proctor Street	2	4
Prospect Row	1	3
Q		
Queen Street		4
Queen's Park Road		2
R		
Radnor Street	2	
Raglan Road		
Railway Terrace	2	12
Ralph Road		
Rann Street		4
Ravenhurst Road	1	2
Ravenhurst Street	1	16
Rawlins street	1	3
Raymond Road		3
Rea Street	2	19
Rea Street South		1
Redhouse Road		
Redvers Road	2	
Regent Parade		
Regent Place	2	3
Regent Road		3
Regent Row	1	3
Regent Street		1
Regent Park Road	1	7
Reginald Road	2	11
Reservoir Retreat		2
Reservoir Road		4
Richard Street	1	9
Richmond Hill Road		
Ridley Street		3
River St., Balsall Heath		8
River St., St. Barthol'w's		
Robert Road	1	
Rocky Lane	4	14
Rodway Street	1	1
Ronald Road	1	7
Rosalie Street	2	3
Rose Road		1
Rosebery Street	1	9
Roshven Road	1	6
Rotton Park Road	1	5
Rotton Park Street		
Rowland Street	2	2
Runcorn Road		3
Rupert Street	2	9
Rushbury Road		
Russell Street		
Ruston Street	4	22
Rutland Road	1	1
Ryder Street	1	2
Ryland Road	2	8
Ryland Street	3	18
S		
St. Andrew's Road	3	22
St. Augustine's Road		1
St. Clement's Road		8
St. George's Place		
St. George's Street	6	16
St. James' Place		5
St. James' Road		1
St. James' Street		6
St. John's Road		1
St. Luke's Road	2	13

STREETS.	Zymotic Diseases.	Other Diseases.
St. Margaret's Road	2	6
St. Mark's Street	2	18
St. Martin's Lane		
St. Martin's Place		2
St. Martin's Row		1
St. Martin's Street	3	12
St. Mary's Road		
St. Mary's Row		5
St. Mary's Street		6
St. Oswald's Road	1	2
St. Paul's Road		9
St. Paul's Square		
St. Peter's Place		
St. Peter's Road		1
St. Saviour's Road	1	6
St. Stephen's Street	1	2
St. Vinceent Street	1	22
Salisbury Road		
Salop Street		2
Saltley Road	4	19
Saltley Street	1	6
Sampson Road	2	6
Sampson Road North	1	1
Sand Pits		4
Sand Street		
Sandon Road		1
Sandy Lane	3	7
Sarah Street		3
Scholefield Street	7	13
Scotland Street		2
Scott Street		
Sefton Road		
Selly Park Road		1
Selwyn Road		
Serpentine Road		6
Severn Street		3
Seymour St., B'sall H'th		
Seymour St., St. Barth.	1	
Shadwell Street		3
Shakespeare Road	1	12
Sheep Street		7
Sheepcote Lane		3
Sheepcote Street	3	11
Shefford Road	1	1
Shenstone Road		5
Sherborne Street	4	30
Sherbourne Road	3	26
Sherlock Street	4	24
Sir Harry's Road		
Skinner Lane	2	5
Skinner Street		4
Sladefield Lane		
Slaney Street		2
Sloane Street	1	5
Smallbrook Street	1	
Smith Street		13
Smithfield Passage		3
Smithfield Street		
Snow Hill	3	4
Somerset Road		
Somerset Street	1	5
Somerville Road		3
South Road	3	9
South Street		2
Southfield Road	1	6
Spark Street		1
Speaking Stile Walk		3
Speedwell Road		2
Spencer Street		2
Spiceal Street		
Spon Terrace		
Spooner Street		5
Spring Hill	3	14
Spring Hill Passage		3
Spring Road		7
Spring Street		2
Spring Vale		
Springfield Street	4	8
Stafford Street		1
Stanhope Street		6
Staniforth Street	2	13
Stanley Road		1
Stanmore Road		3
Station Avenue		
Station Road		1
Station Street		4
Stechford Lane		
Steelhouse Lane	1	7
Stella Street		4
Stephenson Place		
Stephenson Street		
Steward Street	3	16
Stirling Road		8
Stoke Street	3	7
Stone Yard		
Stoney Lane		7
Stour Street	3	19
Stratford Place		
Stratford Road		13
Stratford Street		2
Strensham Road		2
Stuart Street		9
Studley Street		4
Suffolk Street	1	6
Summer Lane	9	41
Summer Road	1	12
Summer Row		3
Summer Street		
Summerfield Crescent		4
Summerfield Road		1
Summer Hill Road		7
Summer Hill Street	1	9
Summer Hill Terrace		
Sun Street	3	7
Sun Street West		2
Sutton Street		5
Swallow Street		1
Sydenham Road		6
Sydney Road	1	6
T		
Talbot Street	3	8
Talfourd Street	2	13
Tarry Road		5
Taunton Road		1
Taylor Street		3
Teall Road		
Temple Row		1
Temple Row West		
Temple Street		1
Templefield Street	5	4
Tenby Street		1
Tenby Street North		2
Tennal Road		
Tennal Lane		
Tennant Street	3	16
Tennyson Road		
Theodore Street	4	13
Theresa Road	1	1
Thimble Mill Lane	1	8
Thomas Street		3
Thorp Street	2	2
Tibbitts Lane		
Tillingham Street		5
Tilton Road	2	18
Tindal Street		6
Tower Street	5	30
Trafalgar Road		
Treaford Lane		
Trent Street	1	9
Trevor Street		7
Trinity Terrace		1
Tudor Street	5	12
Turner Street	3	2
Twyning Road	1	
U		
Unett Street	2	25
Union Passage		
Union Street		
Upper Cox Street		3
Upper Dean Street		
Upper Gough Street		8
Upper Highgate Street	2	11
Upper Marshall Street		5
Upper Mill Lane		
Upper Priory		
Upper Ryland Road	1	5
Upper Trinity Street	3	17
V		
Varna Road	1	5
Vaughton Street		15
Vaughton Street South	2	3
Vauxhall Grove		1
Vauxhall Road	2	25
Vauxhall Street		2
Venetia Road	1	
Ventnor Road		4
Vere Street	4	6
Vernon Road		
Vicarage Rd, Edgbaston		1
Vicarage Rd., Harborne		
Victor Road	1	4
Victoria Grove		
Victoria Road		7
Victoria Street	1	10
Villa Street	1	5
Villiers Street	1	5
Vincent Crescent		2
Vincent Parade	4	12
Vincent Street		15
Vine Street		
Vittoria Street		2
Vivian Road		9
Vyse Street		1
W		
Walford Road	1	7
Walter Street		2
War Lane		
Ward End		2
Ward Street	1	9
Warner Street		10
Warren Street		
Warren Road	1	3
Warstone Lane	6	15
Warstone Parade East		
Warwick Street	3	13
Washington Street		3
Washwood Heath Road	2	13
Water Street	1	3
Waterloo Street		1
Waterworks Road		6
Watery Lane	11	31
Watts Road		1
Wavell Road	1	3
Waverley Road		2
Weaman Street		11
Well Lane		
Well Street	4	24
Wellesley Street		8
Wellington Road	1	6
Wellington Street	3	11
Wenman Street	4	13
Wentworth Road		2
Westbourne Road		
Western Road		
Westfield Road		2
West Heath Road		2
Westley Street	1	6
Weston Street		3
Wharf Lane		2
Wharf Street	3	3
Wharton Street		1
Wheeler Street	2	16
Wheeley's Lane		3
Wheeley's Road		2
Whitby Road		2
White Road		8
White Street		3
Whitehall Road		5
Whitmore Road	1	3
Whitmore Street	3	14
Whittall Street		1
Wiggin Street		2

STREETS.	Zymotic Diseases.	Other Diseases.
Willes Road	2	8
William Street	7	20
William Street North	3	3
William Edward Street	1	2
William Henry Street		2
Willis Street	3	19
Willows Avenue		
Willows Crescent		3
Willows Road	2	2
Wilton Street	1	5
Wimbourne Road		
Windmill Street		
Windsor Street	2	31
Winson Street	3	16
Winson Green Road	1	13
Witton Street	5	2
Wolseley Street	8	3
Wood Lane	1	2
Wood Street		3
Woodbourne Road		
Woodcock Street	2	12
Woodfield Road		6
Wood Green Road	1	2
Woodville Road		
Worcester Street		1
Wordsworth Road		4
Wrentham Street	2	8
Wright Road	5	16
Wright Street		10
Wrottesley Street		
Wyndcliffe Road	1	5
Wyndham Road		
Wynn Street	1	8
X		
Y		
Yardley Road	2	3
Yateley Road		
Yew Tree Road		2
York Road		3
York Street		3
Z		
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